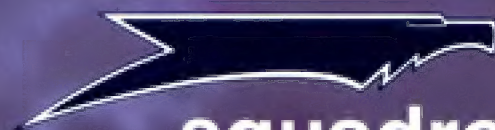


# A-7 CORSAIR II

in action



Aircraft Number 120  
squadron/signal publications

Don Green

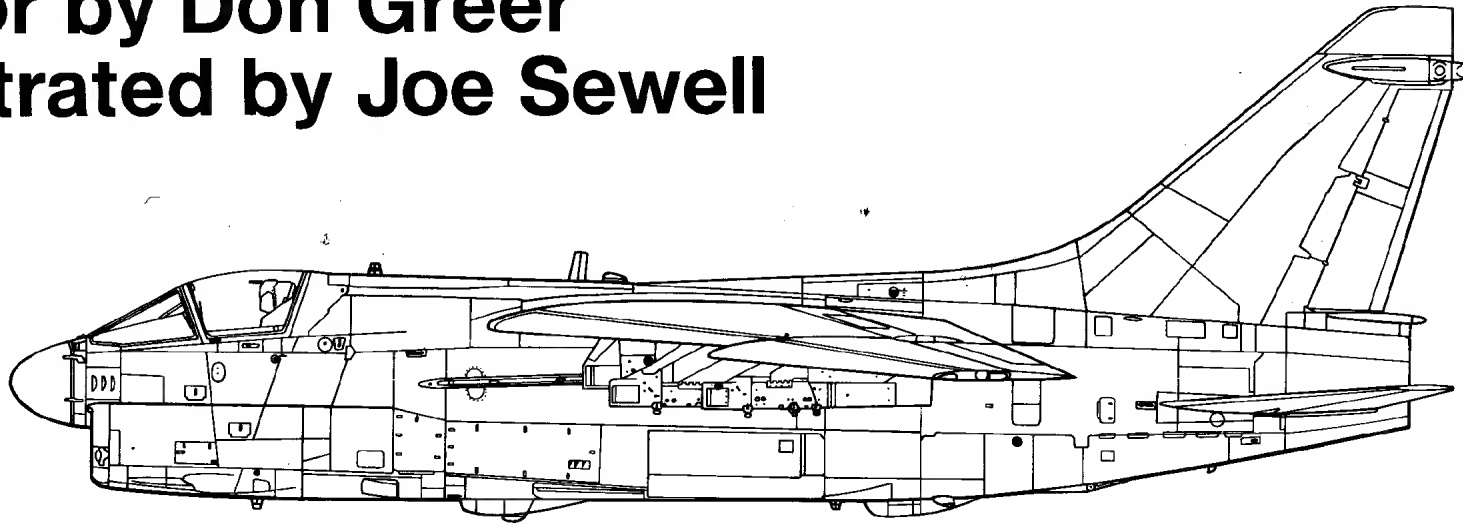
# ***A-7 CORSAIR II***

**in action**

**by Al Adcock**

**Color by Don Greer**

**Illustrated by Joe Sewell**



**Aircraft Number 120**  
**squadron/signal publications**



An A-7E Corsair II of VA-46 Clansmen off the USS JOHN F. KENNEDY flies an anti-radar mission over Kuwait. The A-7E was armed with HARM anti-radiation missiles, AIM-9 Sidewinders and carried a FLIR pod on the inboard wing pylon.



Aircraft Products Group



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## Credits

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Hughes Aircraft  
LTC Bill Simmons  
Doug Nelson  
Dave Menard  
Lois Lovisolo  
Jim Presley

An A-7D (70-1033) of the 198th Tactical Fighter Squadron, Puerto Rican Air National Guard flies over the Caribbean Sea off the Panama Canal Zone. The aircraft is finished in the two tone wraparound European style camouflage. (Eric Cintron)





# Introduction

The U.S. Navy has relied on carrier based attack aircraft to carry the battle to the enemy since the early days of the Second World War in the Pacific. Names like Dauntless, Avenger and Devastator bring back memories of radial engines, speeds of 200 miles per hour and slow landing speeds. All of that changed with the advent of the jet engine.

The first successful jet attack bomber to operate from a U.S. Navy aircraft carrier was the Douglas A3D-1 Skywarrior. The Skywarrior was a forty ton strategic bomber capable of carrying thermonuclear weapons. The A-3 later evolved into a tanker, electronic countermeasures aircraft, reconnaissance platform and trainer.

For tactical missions the Navy, based on Korean war experience, realized it needed an attack aircraft that was low cost, simple to maintain and capable of carrying both conventional and nuclear weapons. Once again Ed Heinemann, chief designer at Douglas Aircraft, came through with an airframe that has been in U.S. Navy service for over forty years and has been used for a variety of missions including attack bomber, tanker, trainer, forward air controller and even light fighter. The A-4 Skyhawk proved itself time and again and remains in front line service with a number of foreign nations as well as the U.S. Navy and Marines where it serves as an aggressor. To find a successor to the A-4, the Navy issued, on 29 June 1963, request for proposals No. 6994-63 for a VA (L) (Light Attack) aircraft.

The Navy's request called for an advanced, light attack aircraft that could carry 15,000 pounds of external stores and operate from a carrier deck with a 600 nautical mile radius of action. The aircraft was required to have aerial refueling capability and it had to be able to defend itself. Further, it was to be subsonic in order to cut down on manufacturing costs and to save fuel. All entries in the VA (L) competition were also required to use the Pratt and Whitney TF30 turbofan engine.

To further cut costs, the VA (L) entries were to be based on aircraft already in service. It was envisioned that the VA (L) would initially supplement the Douglas A-4 Skyhawk and, when sufficient quantities of the new aircraft were available, finally replace it.

**The Vought F8U-1 Crusader was the first U.S. Navy fighter to exceed 1,000 MPH. The F8U later served as the basis for the LTV YA-7A, the winner in the VA (L) Competition. (LTV)**



**The winner in the VA(L) competition to find a replacement for the Douglas A-4 Skyhawk was the LTV YA-7A. This was the second prototype (BuNo 152581) which was used to carry out special weapons tests. The aircraft was in the standard Navy Light Gull Gray over Gloss White camouflage with Orange panels on the fuselage, wings and stabilizers. (LTV)**

The Navy chose four finalists in the VA (L) competition. Douglas Aircraft offered an enlarged version of the A-4 Skyhawk called the A-4F powered by the 11,350 lbst Pratt & Whitney TF30-P-6 turbofan engine. Grumman submitted the G-12, a single seat version of the A-6A Intruder, replacing the side-by-side two seat cockpit with a single seat on-centerline cockpit and adding a folding horizontal tail.

The entry from North American Aviation was an upgraded attack version of the FJ-4B Fury. It was to have an enlarged fuselage (to provide room for the larger engine) and a strengthen wing to accommodate the required 15,000 pound external weapons load.

Ling-Temco-Vought (LTV) submitted a much modified and shortened version of the F-8E Crusader. LTV's design relied heavily on the A3U proposal that had been made to the Navy a few years earlier. By 12 August 1963, forty-five days from the request date, the Navy had received all the proposals for the VA (L).

The Bureau of Naval Weapons (BuWeps) officially declared LTV the winner of the VA (L) competition on 8 November 1963. LTV was the former Chance Vought Aircraft, Inc. (founded in 1917) and was a leading producer of aircraft for the Navy. The company had been responsible for a number of successful Navy aircraft including the OS2U Kingfisher and F4U Corsair of World War II. During 1961, Chance Vought merged with Ling-Temco Electronics thus forming Ling-Temco-Vought Inc., now known as LTV Corporation.

On 8 February 1964, the prototype contract was approved. It called for three prototype aircraft designated as YA-7As (BuNos 152580 thru 152582), four preproduction test aircraft and thirty-five production aircraft.

As the YA-7A prototypes began to take shape the design team headed by John R. Clark had to keep in mind that there was a requirement for a first flight by 19 October 1965. Not only did they have a strict time frame to work in, but there was also a weight restriction. The YA-7A could weigh no more than 14,857 pounds. The aircraft that the LTV design team produced resembled a small F-8 Crusader, although the prototype was an entirely different aircraft, designed from the outset for a completely different mission.



The Grumman G-12 was a competitor to the A-7 for the VA (L) contract. The aircraft was to feature a single seat cockpit and folding horizontal stabilizer. A mock-up was built before the project was cancelled. (Grumman)

The first YA-7A prototype (BuNo 152580) rolled out of the LTV hanger at NAS Dallas, Texas on 13 August 1965, some fourteen months after the contract was signed. The prototype made its first flight 27 September 1965 with LTV's Chief of Flight Operations, John W. Konrad, at the controls. The YA-7A weighed in at 15,497 pounds, some 640 pounds over the contracted weight limit. The increased weight was due to a beefed up wing which was designed to allow the aircraft to carry more than its own weight in ordnance.

The YA-7A was 46 feet 1½ inches long and has an all aluminum alloy, semi monocoque fuselage with a low slung air intake and definite uptilt to the rear fuselage. The aircraft had a tricycle landing gear with a catapult launch bar on the nosewheel strut and had a large T shaped speed brake mounted on the lower fuselage forward of the main landing gear. The aircraft had a height of sixteen feet, a maximum gross takeoff weight of 34,500 pounds and a maximum landing weight of 24,431 pounds.

The YA-7A was powered by a 11,350 lbst Pratt and Whitney TF30-P-6 turbofan which gave the prototype a top speed of 685 mph at sea level and 585 mph at 13,000 feet. The YA-7A was officially christened the "Corsair II" in honor of the Chance Vought F4U Corsair of World War II.



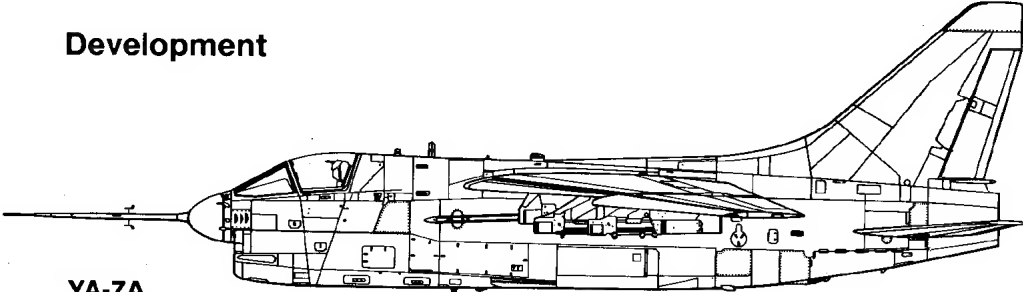
Aircraft number 7 shares the flight deck of USS AMERICA (CVA-66) with a North American Rockwell RA-5C Vigilante reconnaissance aircraft. Later in its career, the A-7, with a TARPS pod, was considered as a replacement for the RA-5C. (Schoeni via J. Sullivan)

A-7 Number 7 was one of the four preproduction aircraft and was used for carrier suitability trials aboard the USS AMERICA (CV-66). The nose catapult bar is in the catapult shuttle indicating that the aircraft is ready for launch. The stripes on the fuselage are photographic reference markings. (U.S. Navy via Jim Sullivan)

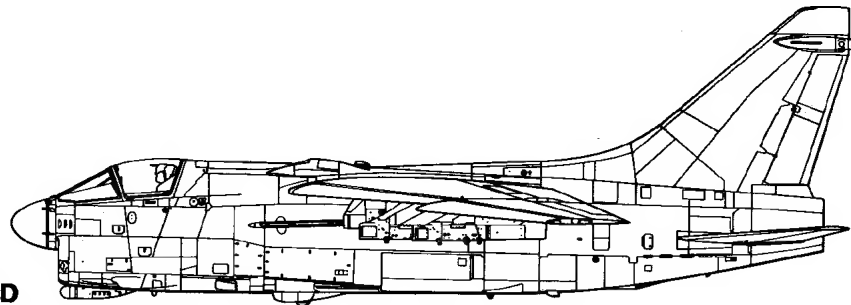


# Development

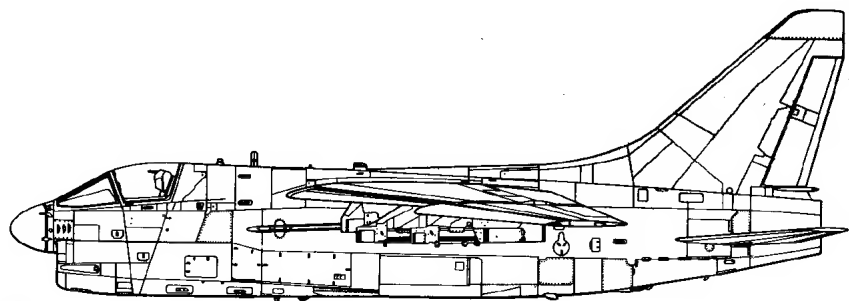
YA-7A



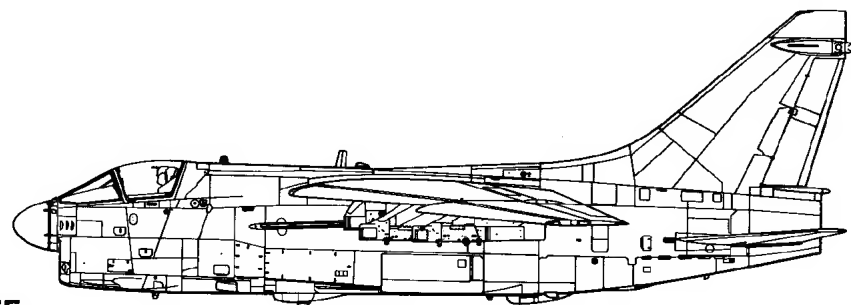
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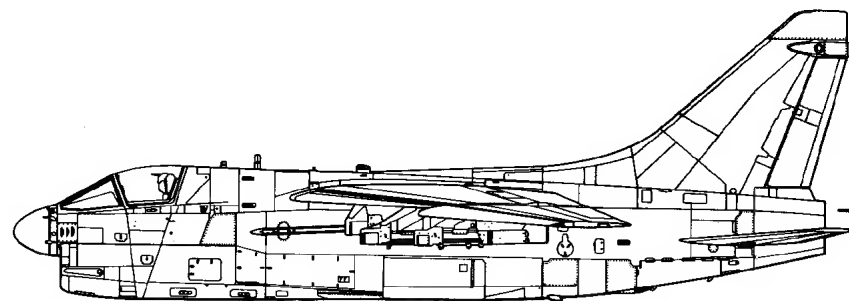
A-7A/A-7P



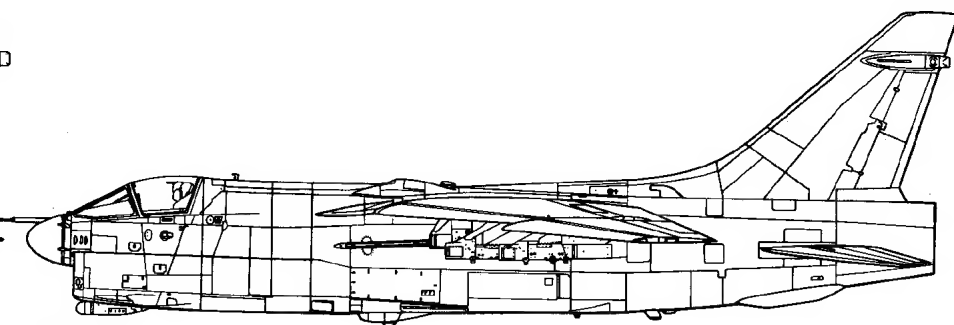
A-7E



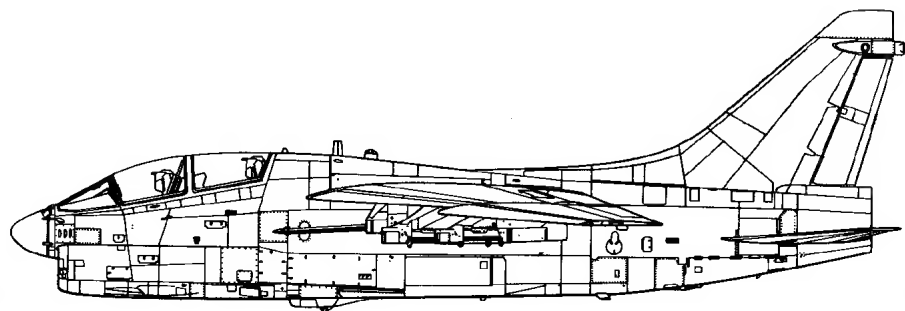
A-7B



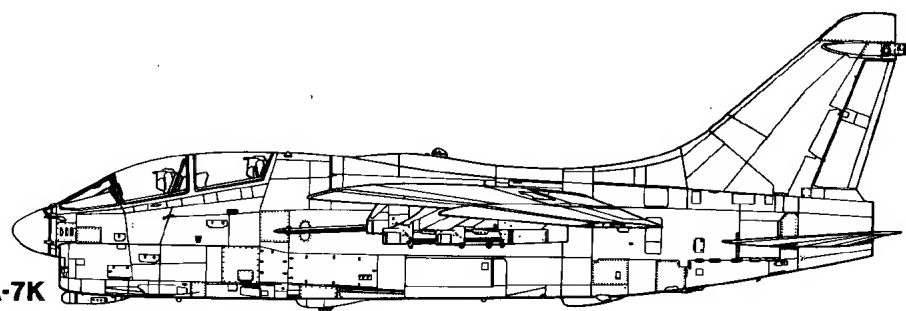
YA-7F



TA-7C



A-7K





# A-7A Corsair II

As production continued on the first thirty-five production A-7As, testing continued at Dallas and NAS Patuxent River, Maryland. Initial carrier qualifications were carried out aboard the USS AMERICA (CVA-66) during November of 1966.

The preproduction test aircraft and the production A-7A differed little from the prototype YA-7A. The prototypes carried no internal armament, while the production A-7A carried two Mk 12 Colt-Browning 20MM cannons which were pneumatically operated and electrically fired. The guns were mounted in the nose and had an ammunition capacity of 340 rounds per gun. For gun aiming the A-7A was equipped with a non-computing optical reflector gun sight.

The A-7A featured the latest in avionics to enable it to do its job as attack bomber. The nose mounted radome contained an APQ-116 forward-looking radar, while the avionics bays contained an APN-153 Doppler radar, an ASN-41 navigation computer and a CP-741 weapons delivery computer. Other avionics to aid in navigation and night operations included an APN-141 radar altimeter, an ARN-52 Tacan and an APN-154 radar beacon. A bullet fairing at the base of the vertical stabilizer contained a tail warning radar antenna and late A-7As had an electronics countermeasures (ECM) antenna carried in a fairing on the upper portion of the vertical stabilizer.

The A-7A was powered by a 11,350 lbst Pratt & Whitney TF30-P-6 turbofan engine giving it a top speed of 607 knots (698.5 mph) at sea level. Empty and maximum loaded weights were 15,037 and 34,500 pounds respectively. The A-7A had a maximum internal fuel load of 1,496 gallons and could carry four 300 gallon external fuel tanks for maximum fuel load of 2,696 gallons, giving the A-7A a ferry range of 2,871 miles. In addition the A-7A was capable of inflight refueling with a partially retractable refueling probe mounted on the starboard forward fuselage side.

The A-7A had eight weapons pylons, three under each wing and one on each fuselage side. The wing pylons were each rated for up to 3,500 pounds, while the fuselage stations

This A-7A (BuNo 152669) was the 26th A-7A off the production as indicated by the Black 26 on the vertical stabilizer. The aircraft will be assigned to a fleet squadron once it was officially accepted by the Navy at the LTV plant at NAS Dallas, Texas. (Navy)



The A-7A Corsair II went into combat over Vietnam during 1968. This A-7A of VA-27 is about to launch from USS CONSTELLATION (CVA-64) for a mission over North Vietnam armed with Mk 82 Snakeye 500 pound low drag bombs and a pair of AIM-9 Sidewinder air-to-air missiles. (Navy)

This A-7A (BuNo 152661) was assigned to the U.S. Navy Test Pilots School, NAS Patuxent River, Maryland. The TPS teaches advanced flying techniques in the latest aircraft that are being introduced into the fleet. The Nitrogen cart under the starboard wing is used to charge the guns and cool electronics. (Jim Sullivan)

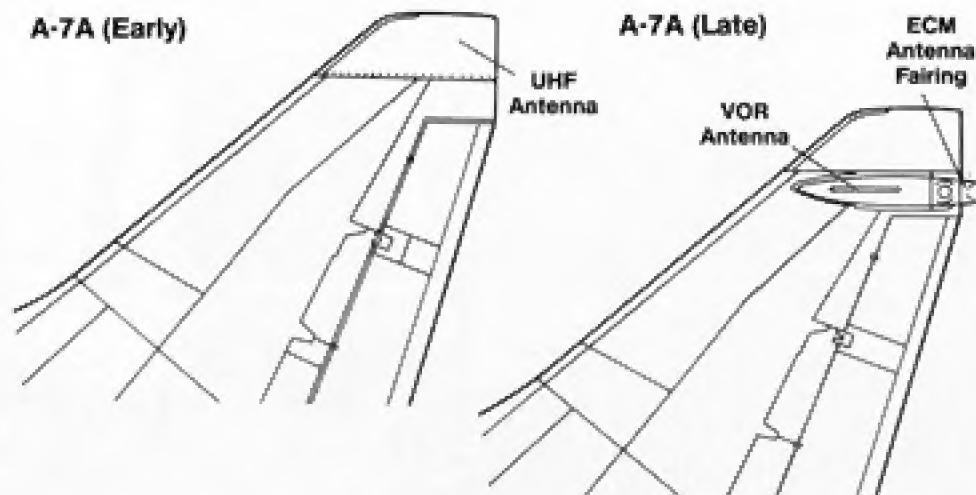






This A-7A (BuNo 153151) was airlifted from NAS Lemoore to NAS Alameda, California by an Army CH-47 Chinook after suffering an engine failure. NJ 292 was assigned to VA-122, the Pacific coast Replacement Air Group (RAG). (Via Jim Sullivan)

## ECM Fairing



were rated at 500 pounds. The fuselage stations were designed to carry an AIM-9 Sidewinder infrared guided air-to-air missile for self-defense or an LAU-33A/A launcher that carried two Zuni free-flight rockets.

A-7As joined the fleet when the Atlantic coast Replacement Air Group (RAG), VA-174 Hellrazors, received their first aircraft during October of 1966. VA-174 was charged with training Corsair II pilots for fleet squadrons.

VA-147 Argonauts aboard USS RANGER (CVA-61) were the first operational attack squadron to fly the A-7A. The squadron entered an intensive training program to work out any problems before it sailed to Yankee Station in the Gulf of Tonkin off of the North Vietnamese coast. On 3 December 1967, CDR C. Hill led a flight of A-7As off the deck of USS RANGER for an attack on targets around Vinh, in the southern portion of North Vietnam. After successfully hitting their targets, all aircraft returned safely to the RANGER.

Weapons loads for missions over Vietnam normally consisted of six Mk 82 low drag 500 pound bombs, two LAU 32 seven shot 2.75 inch FFAR rocket launchers and two 300 gallon underwing fuel tanks. Additionally, on any mission going into North Vietnam, the A-7s would carry an AIM-9 Sidewinder air-to-air missile on each fuselage station.

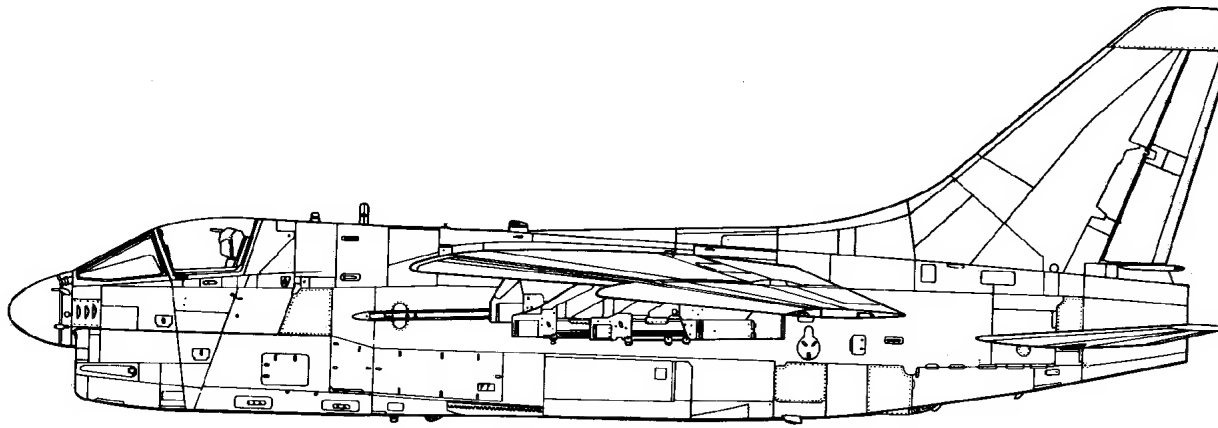
Although never used, the A-7A was qualified to carry four different types of nuclear free fall bombs. The Mk 28 and B43 were 2,100 pound high yield weapons, the Mk 57 was a 510 pound nuclear depth bomb and the Mk 61/B61 was a 710 pound thermonuclear (Hydrogen) device. When nuclear weapons were mounted, only two could be carried and then only on stations 2, 3, 6 and 7.

Guided weapons included the AGM-62 Walleye, a highly accurate TV guided glide bomb. The Walleye was a deadly accurate weapon that could be armed with either a 2,000 pound nuclear warhead or an 850 pound conventional warhead. Other weapons cleared for use on the A-7A were the AGM-45 Shrike and AGM-78A Standard ARM anti-radiation missiles, the Zuni free flight air-to-ground rocket, the Mk-20 Rockeye cluster bomb, plus free fall and retarded bombs ranging from 500 to 2,000 pounds.

Over the course of its production run, a total of 199 A-7As were produced for the Navy.

Apocalypse was an A-7A (BuNo 153254) of VA-304 (call sign Firebird 407). VA-304 was a reserve squadron and was visiting NAS Miramar, California. The rudder and fin cap were Orange with White markings. The aircraft carries a Battle E award and a Navy Unit Commendation ribbon painted on the nose. (Mancus via Jim Sullivan)





## Specifications

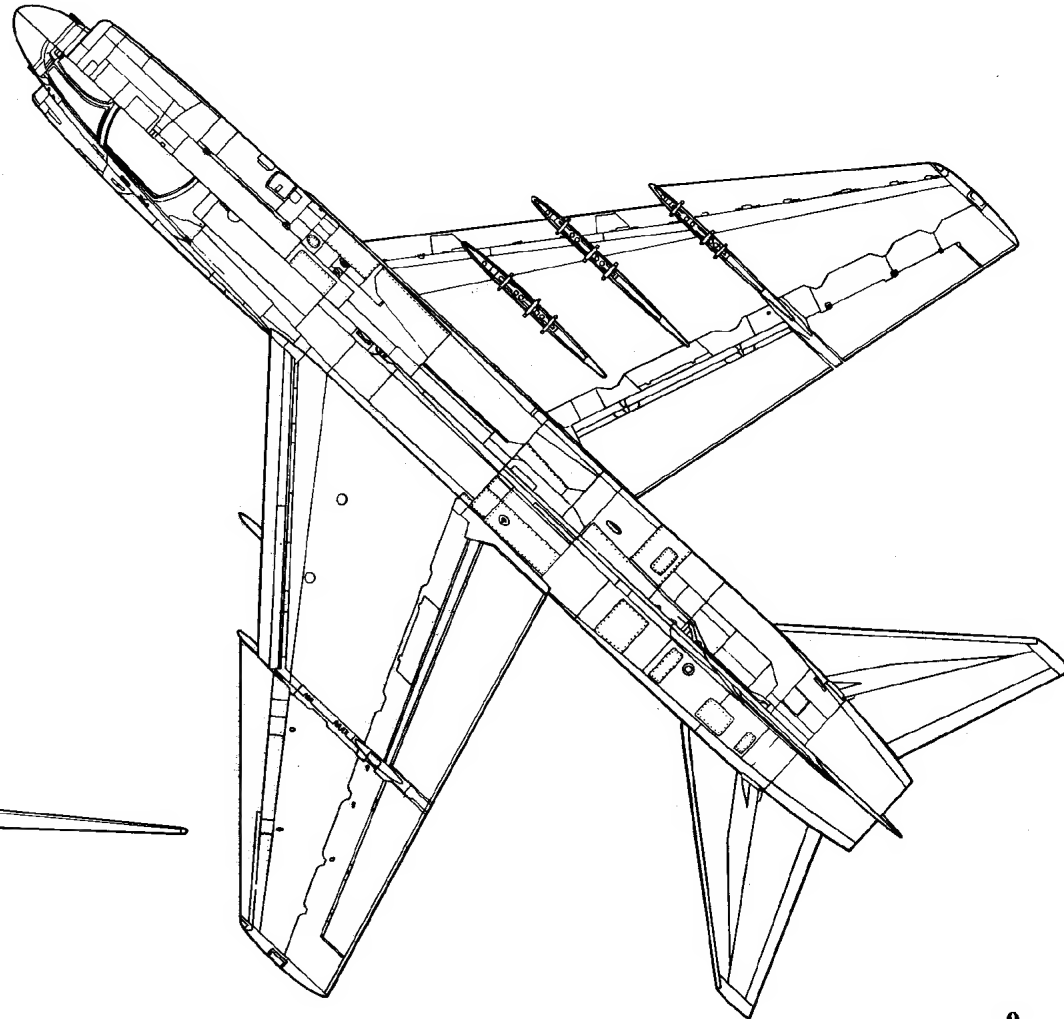
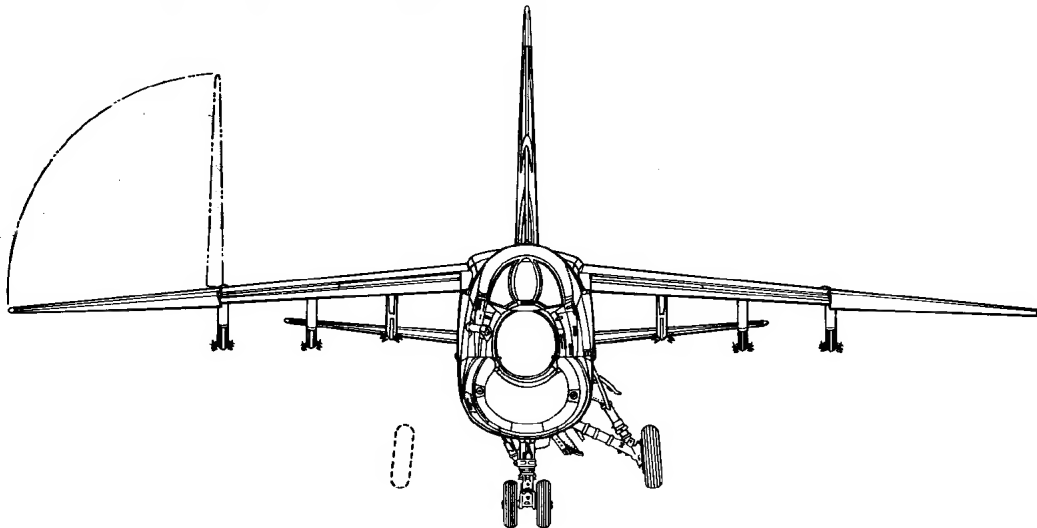
### LTV A-7A Corsair II

Wingspan ..... 38 feet 9 inches  
 Length ..... 46 feet 2 inches  
 Height ..... 16 feet 2 inches  
 Empty Weight ..... 15,037 pounds  
 Maximum Weight ..... 32,500 pounds  
 Powerplants ..... One 11,350 lbf Pratt & Whitney  
 TF30-P-6 turbofan

Armament ..... Two Mk 12 20MM cannons and  
 up to 20,000 pounds of ordnance.

#### Performance

Maximum Speed ..... 698.5 mph  
 Service ceiling ..... 47,000 feet  
 Range ..... 2,871 miles  
 Crew ..... One



# A-7P

During 1980, LTV received a contract from the U.S. Navy to modify and refurbish twenty A-7As for sale to the Portuguese Air Force under the Military Assistance Program (MAP).

The twenty A-7As were retrieved from storage at Davis Monthan Air Force Base and re-engined with the 13,400 lbf Pratt & Whitney TF30-P-408 turbofan engine. In addition, the aircraft were updated with improved avionics and radar systems.

During 1983, the Portuguese ordered an additional thirty A-7s, twenty-four A-7Ps and six two seat trainer variants, designated TA-7Ps. The A-7Ps were armed with the same MK 12 Colt-Browning 20mm cannons as the A-7A, while the TA-7Ps had the cannons deleted. Both the A-7P and TA-7P serve with *Esquadra 302* and 304 stationed at Monte Real on the north central coast of Portugal. Their primary missions are maritime surveillance and anti-shipping strike under NATO control. Their secondary mission is close air support for the Army.

The Portuguese Air Force received a total of forty-four A-7Ps (refurbished A-7As). The aircraft were powered by an updated Pratt & Whitney TF30-P-408 turbofan and had updated electronics. The A-7Ps serve with the 302nd and 304th Squadrons based at Monte Real, Portugal. (LTV)



This A-7P (serial 5534) of Esquadra 304, was part of the second batch of A-7Ps purchased by Portugal. The A-7P is painted in a wraparound two-tone Dark Green and Light Tan camouflage scheme. (Portuguese Air Force.)

A flight of four A-7Ps from Esquadra 302 fly over the Atlantic near their home base at Monte Real. The Portuguese use the A-7P in support of NATO and to perform the anti-shipping/ maritime surveillance mission. (LTV)





# A-7B

While production of the A-7A was still ongoing, LTV received a contract from Naval Air Systems Command (NAVAIR) for an improved variant under the designation A-7B.

Externally, the A-7B differed very little from the earlier A-7A. The A-7B was powered by an improved 12,200 lbf Pratt and Whitney TF30-P-8 non-afterburning turbofan engine in place of the earlier 11,350 lbf TF30-P-6 engine. The new engine gave the A-7B a top speed of 683 mph at sea level, 625 mph at 11,500 feet and a rate of climb of 7,290 feet per minute.

Empty weight increased from 15,037 pounds (A-7A) to 16,133 pounds and loaded weight rose to a maximum of 37,027 pounds. Most of this weight increase was in the strengthened wing which could now carry some 20,000 pounds of ordnance. Normal combat loads included 7,500 pounds of bombs, two AIM-9 Sidewinders air-to-air missiles and 1,500 gallons of fuel.

Further improvements in the A-7B included variable position flaps and the addition of a sixteen millimeter strike camera (used to record strike photography for bomb damage assessment BDA). The camera was located on the starboard side of the optical gun sight and was retrofitted to some A-7As.

The first flight of an A-7B occurred on 6 February 1968, although the aircraft was actually the third production A-7B. As the pace of production quickened, A-7Bs were quickly integrated into the fleet. The A-7B was first deployed aboard USS ENTERPRISE (CVN-65) with Carrier Air Wing II. The wing had two A-7 squadrons, Attack Squadrons Twenty-two (VA-22) and Ninety-four (VA-94). The first squadron to take the

A-7B into combat was VA-147 Argonauts, the same squadron that took the A-7A into battle.

Internal armament on the A-7B was the same as the A-7A, two Mk 12 cannons, while external armament options were increased by the addition of a capability to carry the Mk 4 20MM gun pod.

A total of 196 A-7Bs were produced in two production lots with the last A-7B being delivered on 7 May 1969. LTV proposed two extensive modification programs for A-7B airframes that are in storage. The first program was known as the International Corsair II. Under this program, A-7Bs would be modified with new avionics, wiring and provision for night attack utilizing a Forward Looking Infrared (FLIR) pod. The aircraft would also receive an uprated, overhauled engine. This program would result in a viable strike aircraft at a much lower cost than an all new airframe.

The second proposal was called the International Corsair III, once again based on the A-7B airframe. The program called for a fuselage stretch of two feet six inches forward of the wing and seven inches behind the wing to house a 26,900 lbf General Electric F110-GE-100 afterburning turbofan engine. The stretch would also allow for an increase in internal fuel capacity by some 172 gallons. Other modifications would include digital avionics, a night/all-weather capability, a FLIR system, a Head-Up-Display (HUD) plus active and passive electronics countermeasures (ECM). The Corsair III would be armed with two Mk 12 cannons and was to be capable of carrying all USAF, USN and NATO munitions.

Late in the A-7B's career the Navy decided to upgrade the engine. As a result, the 12,200 lbf TF-30-P-8 had a field modification kit installed that increased the thrust of the engine to 13,400 lbf. The modified engines were redesignated as TF30-P-408s.

An A-7B assigned to VA-155 Silver Foxes taxis on the ramp at NAS Cubi Point, Subic Bay, Philippines. VA-155 was serving aboard USS ORISKANY (CVA-34) for operations over Vietnam. The A-7B was equipped with a buddy store refueling pod on the number 1 pylon. (Nicholas J. Waters III)



This Barn Owls (VA-215) A-7B carries the tail code AE, which would normally indicate that it was attached to Carrier Air Wing 5 (CVW-5). Actually, VA-215 was a West Coast squadron on temporary duty aboard USS ROOSEVELT (CVA-42). The tail markings were Green with Red stars. (Kasulka via J. Sullivan)





A pair of VA-215 Barn Owls assigned to Carrier Air Wing 19 (CVW-19) aboard USS ORISKANY (CVA-34) in the Pacific. All tail markings are in Black with the ECM fairing in Red. Each A-7 has a face painted on the radome. (Navy via N.J. Waters III)



An A-7B of VA-15 Vellons prepares to launch from the number 2 catapult aboard USS INDEPENDENCE (CV-62) while a McDonnell-Douglas F-4J Phantom II of VF-102 Diamondbacks is positioned on the number 1 catapult. AE305 carries a Battle E ribbon award for combat readiness above the fuselage national insignia. (Navy)

This A-7B (BuNo 154373) was assigned to the Naval Air Engineering Center (NAEC) at NAS Lakehurst, New Jersey during 1982. The aircraft was used to test catapult and recovery systems. The jet intake warning has teeth painted in it and an eye is painted over the aircraft number (373). (via J. Sullivan)





An A-7B (BuNo 154390) of VA-305 Lobos flies over the northwest Pacific coast during 1981. The Lobos serve with Reserve Carrier Air Wing Thirty (CVWR-30) and are one of three such reserve squadrons that flew the A-7 on the Pacific Coast. (Navy)



This A-7B is being used by the San Diego Naval Training Center to teach fire fighting techniques. Most high time airframes that were not rebuilt as two seater trainers or stripped for parts were assigned as either ground training or turned into targets. (Navy)

An A-7B (BuNo 154377) of VA-125 rolls out with the arresting gear still engaged aboard USS LEXINGTON (AVT-16). NJ 511 was assigned to VA-125 Rough Riders and operated as one of the two Pacific Coast Replacement Air Groups (RAGs). The stripes on the rudder and fin cap were in Green. (Navy via M. Slover)



Ground crewmen prepare this A-7B (BuNo 154388) of VA-204 for flight at NAS New Orleans, Louisiana. VA-204 River Rattlers was part of Reserve Carrier Air Wing Twenty (CVWR-20). AF404 had a Red fin cap with the aircraft number repeated on it in Black. (C.H. Pilkington)





# A-7C

The original designation A-7C had been reserved for a proposed two-seat operational trainer variant of the A-7A, but when that program failed to materialize the designation was given to the first sixty-seven aircraft of the A-7E contract. This was done to avoid confusion with later production aircraft because of the engine installed in these airframes.

These aircraft were powered by the same engine that had powered the late A-7B, the 13,400 lbst Pratt and Whitney TF30-P-408 engine, while the engine specified for the A-7E was the 15,000 lbst Allison/Rolls-Royce TF41-A-2 turbofan. Since Allison was experiencing production problems with the engine, the Navy decided to install the Pratt and Whitney engine in these early A-7E airframes until the Allison engine became available. It wasn't until airframe Number 68 that the Allison engine became available for installation.

The A-7C was basically an improved A-7B, incorporating a General Electric M61A1 Vulcan 20MM multi-barrel rotary cannon capable of firing some 6,000 rounds per minute. The cannon was mounted in a bulged fairing on the port side of the aircraft's nose and replaced both Mk 12 cannons used on the A-7A and B.

Other improvements included the installation of anti-skid brakes, an improved triple redundant hydraulic system for the flight controls and a Head Up Display (HUD) which replaced the earlier optical gun sight. The AN/AVQ-7(V) HUD receives and displays computed attack and navigation data from the tactical computer. The HUD also displays aircraft performance data such as airspeed, altitude, attitude and heading. The HUD consists of a flat pane of glass on which the symbology is projected; the HUD is mounted directly in front of the pilot on the instrument panel combing.

The AN/ASN-91(V) navigation/weapons delivery computer allows an A-7C pilot to fly to the precise target location and accurately drop his ordnance on target. The A-7C

This A-7C (BuNo 156776) was stationed at NAS Patuxent River, Maryland. The aircraft has an auxiliary power unit by the nose and an air starter cart by the rear fuselage. The outer wing pylon is configured with Mk 78 practice bombs loaded on an A/A 37B-6 Multiple Ejection Rack (MER). (Jim Sullivan)



was also equipped with the AN/AVQ-126(V) forward-looking radar which had some ten modes of operation including: terrain following and ground mapping.

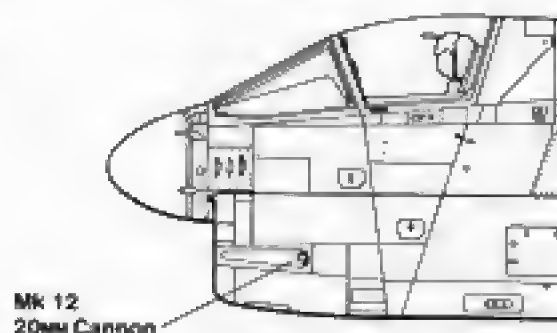
## NA-7C

Three A-7Cs were redesignated as NA-7Cs, which indicated that they were in the permanent special test category. The first NA-7C (BuNo 156734) was delivered to NAS Patuxent River, Maryland for Board of Inspection and Survey (BIS) trials on 13 June 1969. BuNo 156734 was the first production A-7C and the Navy wanted to do extensive testing on the aircraft, its electronics and weapons delivery system. The sixth production A-7C (BuNo 156739) was sent to the Naval Weapons Center at China Lake, California for extensive gun and missile tests. The third NA-7C (BuNo 156782) was used by the Naval Air Development Center, Warminster, Pennsylvania as a chase plane in the YT2J-1 (T-2) Buckeye test program.

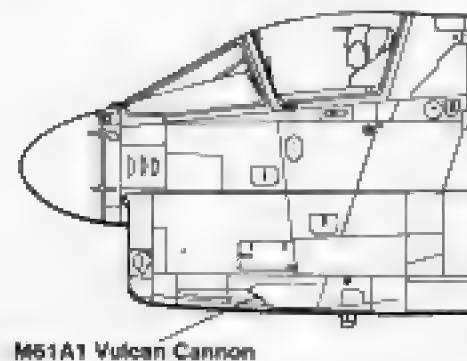
NA-7C (BuNo 156782) was also used in developmental tests of the Tactical Airborne Reconnaissance Pod System (TARPS) during 1975. The TARPS pod was built from a 300 gallon fuel tank and contained cameras plus an infrared line scanner. It was originally intended that the A-7 would be the interim aerial reconnaissance aircraft to replace the North American RA-5C (A3J-3P) Vigilante. After conferring with photo-reconnaissance analysts and other users in the fleet, the A-7 was rejected as a camera platform mainly due to the fact that the fuselage would blank out part of the panoramic camera's field of view. In the event, the Grumman F-14A was picked to carry the pod.

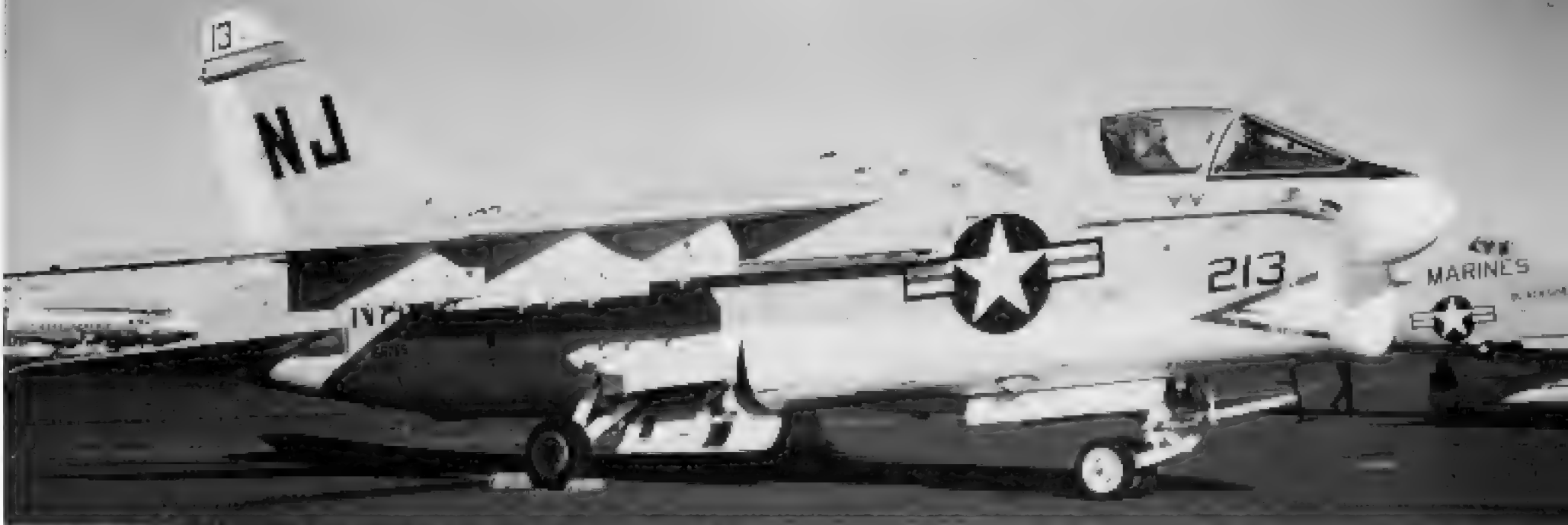
### Armament

#### A-7A/B



#### A-7C





This A-7C (BuNo 156765) of VA-122 Flying Eagles carries an NJ tail code. VA-122 served as one of two Pacific Fleet Replacement Air Groups (RAGs). The aircraft was later converted to the two-seat TA-7C configuration and later served with the Strike Warfare Center. The fin stripe was Yellow with thin Black outlines. (Terry Love)

The Naval Weapons Center at NAS China Lake, California had a number of Corsair IIs assigned including this A-7C (BuNo 156739). The aircraft was being used for special weapons test and was later redesignated as an NA-7C. (Muir via T. Love)





An A-7C (BuNo 156794) of VA-82 Marauders chocked and chained down aboard USS AMERICA (CV-66). VA-82 and VA-86 Sidewinders briefly operated the A-7C when their A-7Es experienced engine problems with the TF41 turbofan. All squadron markings are in Blue, the tail code is in White with a Blue outline. (Bob Sides via J. Sullivan)



This NA-7C (BuNo 156782) carries a TARPS pod on the outboard wing pylon. The NA-7C served as a test bed for the TARPS program and for a while the A-7 TARPS combination was considered as a possible replacement for the RA-5C. (Navy)

An NA-7C (BuNo 156782) flies in formation with a YT-2A (YT2J-1) (BuNo 144218). Both aircraft were attached to the Naval Air Development Center (NADC), Warminster, Pennsylvania. The NADC is charged with developing new systems for the Navy such as avionics, electronics, external weapons and pods. (Navy)

NA-7C (BuNo 156782) carries a Tactical Aerial Reconnaissance Pod (TARPS) during operational testing of the system. This TARPS was the Advanced Development Model (ADM) and contained four cameras and three infrared line scanners. Development work was stopped when it was decided to use the F-14A/TARPS combination instead of the A-7. (Navy)





# TA-7C

During 1976, the Navy authorized the conversion of twenty-four A-7Bs and thirty-six A-7Cs to a two seat trainer configuration under the designation TA-7C. The first TA-7C conversion to fly was an ex-A-7B (BuNo 154177) which lifted off from the LTV Dallas facility on 17 December 1976.

The TA-7C conversion involved adding a sixteen inch plug ahead of the wing and an eighteen inch plug behind the wing increasing the fuselage length to 48 feet 11.5 inches. The upward opening canopy was replaced with a long side opening canopy. To aid in short field landings, a braking parachute was added with the housing installed at the base of the vertical stabilizer.

A later follow-up contract from the Navy authorized the conversion of twenty A-7Es to the TA-7C configuration. The contract also called for re-engining forty-nine of the original sixty TA-7Cs with Allison/Rolls-Royce TF41-A-2 turbofan engines to provide additional thrust for combat maneuvering. The use of this engine also eased maintenance since it was the same engine used in the A-7E. Additionally, the ejection seats were changed from the Douglas Escapec IG-4 to the Stencel SJL-8/A ejection seat, which provided better maintainability over the Douglas units.

## EA-7L

The EA-7L was a conversion of the TA-7C to the electronics warfare configuration. EA-7Ls, with the exception of the removal of one piece of radio equipment, are standard

An A-7B (BuNo 154477) was used to produce the first A-7 two seat conversion. Designated the TA-7C the aircraft made its first flight on 17 December 1976. Besides the new longer canopy, the aircraft had a 16 inch plug forward of the wing and an 18 inch plug behind the wing. To aid in short field landings a braking parachute housing was added at the base of the vertical stabilizer. (LTV)



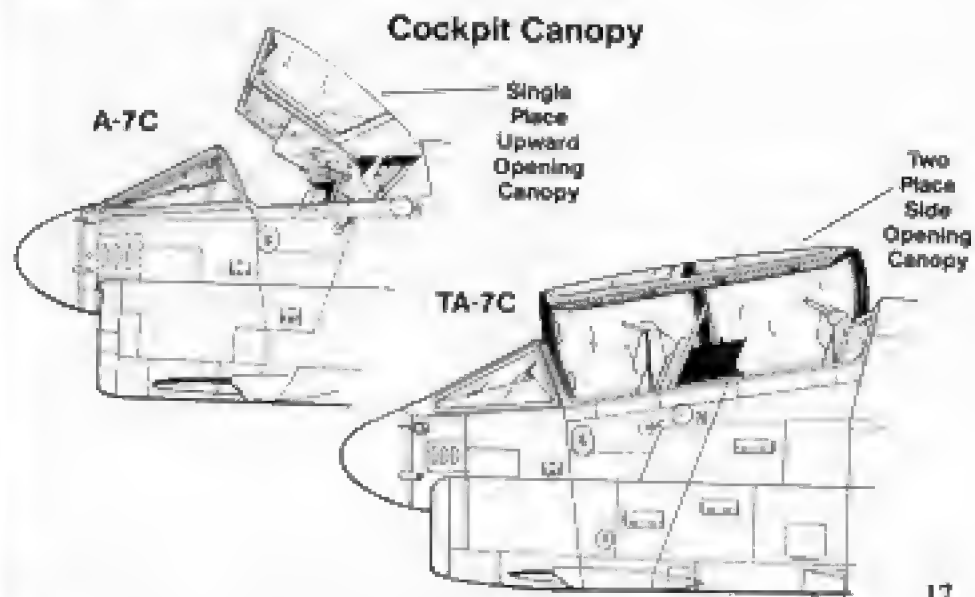
TA-7C aircraft equipped to carry ECM emitter pods. The EA-7L operates as a threat trainer, mainly to test the capability of the carrier combat air patrols (CAPS) and surface ships to defend themselves against hostile aircraft and air-to-sea anti-ship missiles. The EA-7L carries an AN/ALQ-167 Multiple Environment Threat Emitter (METE) pod and three different ECM jammer pods: the AN/ALQ-70, AST-4 and AST-7 pods.

All EA-7Ls are assigned to VAQ-34 Flashback at NAS Lemoore, California as part of the Fleet Electronics Warfare Support Group (FEWSG). The aircraft carry a Soviet style Red star on the vertical stabilizer to identify them as electronic aggressors. VAQ-34 was previously called the Electric Horsemen and carried a GD tail code with a Red lighting flash through the letters. As of August 1991, VAQ-34 had an authorized strength of seven aircraft and was the last active Navy squadron to fly the Corsair II. It is anticipated that the squadron will begin transition to the EF-18 Hornet during January of 1992.

## YA-7H

Since 1968, LTV had been sending the Navy and Air Force ideas on a two-seat variant of the A-7 that could be used for Wild Weasel missions or air crew training. During late 1971, authorization was given to use the first production A-7E (BuNo 156801) as a test bed to develop a two seat variant of the A-7E. The prototype aircraft was originally designated as the YA-7E and then, to differentiate it from the single seat A-7E, was changed to YA-7H. The modifications included a sixteen inch and eighteen inch plug in front of and behind the wing respectively and a long side opening canopy. The TF41-A-2 turbofan engine of the A-7E was retained and, despite the increased fuselage length, no speed penalty was incurred and the aircraft actually had better handling characteristics.

In order to alleviate any confusion in aircraft designators between Navy and the Greek (Hellenic) Air Force aircraft (designated with a H suffix letter), the YA-7H was once again redesignated as a TA-7C (to conform with the other two-seat A-7s in service). During August of 1988, the aircraft was bailed to the Martin-Marietta Company in Orlando, Florida, for installation of a Forward Looking Infrared (FLIR) pod on the number two wing pylon.





The first production A-7E (BuNo 156801) was converted into a two seat Corsair II. It was initially designated as the YA-7H, then changed to YA-7E then finally to TA-7C. The aircraft was loaned to Martin-Marietta for tests of the Pathfinder navigation system (installed on the number 2 wing pylon). (Martin-Marietta)

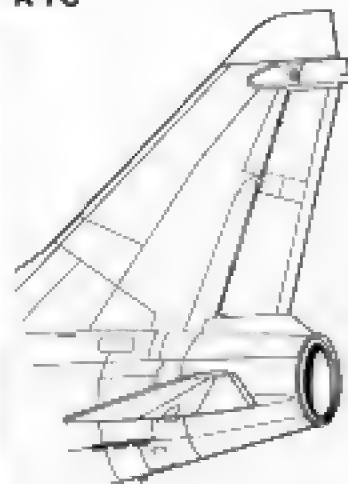
A flight of TA-7Cs on a weapons training mission over the western U.S. The aircraft are armed with Mk 82 bombs on Multiple Ejector Racks (MERs). All are from VA-174, the East Coast Replacement Air Group (RAG). The TA-7C has a braking parachute housing at base of vertical stabilizer. The tail markings are Yellow diamonds on a Black Stripe. (LTV)



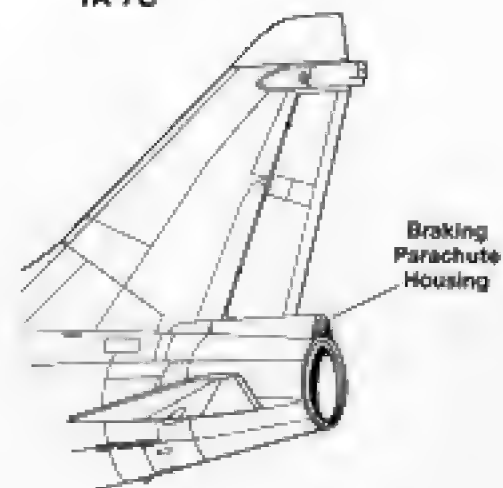
This TA-7C (BuNo 156747) of VA-174 carries the low-vis tactical Gray camouflage scheme. AD454 was attached to VA-174, the Atlantic Fleet RAG. All markings were in Light Gray including the Tomahawk on the underwing fuel tanks. The TA-7C was used as an advanced combat trainer and was fully combat capable. (Navy)

### Braking Parachute Housing

A-7C



TA-7C





NJ225 of VA-122 was an A-7C that was rebuilt to TA-7C (BuNo 156753) standards. VA-122 was the West Coast Replacement Air Group (RAG). NJ225 carries the late 1970s camouflage scheme of Light Gulf Gray over Gloss White with full color markings. (Terry Love)

A TA-7C (BuNo 154464) parked on the ramp at NAS Patuxent River, Maryland. The aircraft was assigned to the Naval Test Pilots School (NTPS) and is finished in Light Gulf Gray over Gloss White with Red wings and vertical stabilizer. The NTPS teaches advanced flying to experienced naval aviators assigned to become test pilots. (Terry Love)



The crew of this EA-7L man their aircraft for another mission. The EA-7L is used by VAQ-34 as an electronics warfare training aircraft. The aircraft is overall Gray with White lighting flashes through the Dark Gray GD tail code. (Kirkup via T. Love)

This TA-7C (BuNo 156787) is fitted with a Radar Simulating Set (RSS/JEEP) pod on the number one wing pylon. Aircraft number 84 was attached to the Pacific Missile Test Center, NAS Point Mugu, California. The PMTC emblem is carried over a Blue stripes on the fin. (Navy)







A TA-7C (BuNo 156785) on the ramp with its right avionics bay open. The TA-7C was serving with the Strike Warfare Center at NAS Fallon, Nevada. The TA-7C was a former A-7C and previously served with VA-122 until it was converted to the two seat configuration. (Terry Love)



A TA-7C (BuNo 154544) of the Pacific Missile Test Center (PMTTC) on a test mission carrying a radar simulator pod on the number one wing station. Aircraft number 82 is finished in overall Medium Gray with a stylized PMTC badge on the tail. (Navy)

An EA-7L of VAQ-34 on the ramp at NAS Lemoore, California. GD 204 was repainted with a Soviet style Red star on the vertical stabilizer. The aircraft formerly served with VA-174 as a TA-7C. The aircraft is overall Medium Gray with Dark Gray lettering and numbers. (Brown via T. Love)



Two EA-7Ls prepare to depart on a training mission during 1987. EA-7Ls are operated by VAQ-34 as simulators for threats to not only aircraft but to ships as well. The emitter pods simulate Soviet aircraft and missile threats. The GD tail code has been replaced by a Soviet style Red star. (Navy)



# A-7D

The flight test program for the YA-7A was still underway when the U.S. Air Force announced its intention to purchase the A-7 for use by the Tactical Air Command. The Air Force planned to use the A-7 as a replacement for the Douglas A-1 Skyraider, North American F-100 Super Sabre and the Republic F-105 Thunderchief.

The A-7D, as it was designated by the USAF, was basically a modified A-7A. The USAF wanted a more powerful engine and contracted with Allison, a division of General Motors, to license produce the 14,250 lbf Rolls-Royce RB162-256 Spey turbofan engine for installation in the A-7D. Other changes incorporated in the A-7D were the installation of a flying boom type inflight refueling receptacle, increased armor protection for the engine and pilot with boron-carbide (HFC) armor being installed (this armor was lighter than conventional steel armor plate).

To increase the aircraft's firepower the two Mk 12 cannons were replaced by a single General Electric M61A1 Vulcan multi-barrel rotary 20mm cannon. The M61 was provided with some 1,000 rounds of ammunition and could be set to fire at either 4,000 or 6,000 rounds per minute. To further increase firepower three different gun pods were cleared for use: these included the SUU-16/A and SUU-23/A 20mm gun pods or the GPU-5/A 30mm gun pod.

The A-7D was equipped with a sophisticated targeting and navigational computer. The AN/ASN-91 digital computer used cues from the Doppler AN/APN-190 radar, AN/APQ-126 forward looking radar, and the AN/APN-141 radar altimeter to compute the aircraft's exact position. To provide this data to the pilot, a head-up-display (HUD) replaced the earlier optical sight used in the A-7A and A-7Bs. The HUD displayed information such as airspeed, altitude, heading, targeting cues, weapons status and other information pertinent to navigation or attack.

By March of 1968, the first two YA-7D prototypes had been completed, although both retained the Navy style probe and drogue refueling system and, due to an engine production problem at Allison, the Pratt & Whitney TF30-P-8 engine was installed. Due to an engine stator problem the -8 was replaced by the earlier TF30-P-6 engine for the prototype flight tests. The first prototype (67-14582) made its maiden flight on 6 April 1968.

The first twenty-six A-7Ds were built with the Navy probe and drogue system, with the boom system being installed on Block 4 and later aircraft. The Allison/Rolls-Royce TF41-A-1 was installed in the third A-7D and all subsequent aircraft. The TF41 powered A-7D made its maiden flight on 26 September 1968, after being transported to Edwards Air Force Base, California by an Aero Spaceflites Super Guppy transport.

The A-7D retained the same wing span and length as the A-7A and A-7B although the height was increased to 16.06 feet due in part to the larger tires and wheels installed on the A-7D. Along with the increased wheel size, larger and improved brakes were fitted. Empty weight on the A-7D rose to 19,815 pounds (16,133 pounds for the A-7B) and maximum takeoff weight increased to 42,000 pounds. A maximum of 15,000 pounds of ordnance could be carried on the six wing pylons.

The internal fuel capacity of the A-7D was reduced to 1,425 gallons due to the use of self-sealing foam filled fuselage tanks. The A-7D had a maximum range of 1,981 nautical miles on internal fuel and a unrefueled ferry range (with four 300 gallon external tanks) of 2,494 nautical miles.

Top speed of the A-7D was 698 mph and the normal cruising speed was 507 mph. Service ceiling was 38,800 feet and normal combat ceiling was 36,700 feet. Combat radius of action was 556 miles with 6,560 pounds of external ordnance and two 300 gallon external fuel tanks.

Deliveries of the A-7D began during September of 1969 with the 54th Tactical Fighter Wing at Luke AFB, Arizona being the first unit to receive the new aircraft. The 54th began an intensive training program to integrate the A-7D into frontline Tactical Air Command use. The A-7D saw first combat with the 354th Tactical Fighter Wing based at Korat Royal Thai Air Base, Thailand on 16 October 1972. The A-7s flew strikes against targets in Laos, Cambodia and North Vietnam. In the two years that the A-7D was in combat over Southeast Asia only four A-7Ds were lost, a real tribute to the toughness of the aircraft and its crews.

A total of 459 A-7Ds were produced in seventeen production blocks and over three quarters of these aircraft are still in active service with the Air National Guard. The Air National Guard operated a total of 354 A-7D and A-7Ks assigned to some thirteen squadrons from Puerto Rico to South Dakota. The Air Guard actually received new production A-7Ds right off the assembly line marking the first time that an air guard unit was provided with new versus hand-me-down aircraft.

During 1977, the Air Force modified the remaining A-7Ds with automatic maneuvering flaps and a *Pave Penny* laser marked target seeker system. The *Pave Penny* system was housed in a tear drop fairing mounted under the air intake just forward of the nosewheel well. The system is slaved to the HUD and provides the pilot with aiming data for laser guided munitions. Additionally, a pair of ECM button antennas were added to the nose, one on either side of the intake.

The last A-7Ds in combat were from the 166th TFS and 175th TFS of the Ohio and South Dakota ANG. These units were involved in Operation JUST CAUSE, when the U.S. ousted Manuel Noriega from Panama in December of 1989. The A-7D flew close air support for U.S. forces in and around Panama City.

The first prototype A-7D-1CV (76-14582) prepares for its first flight on 26 September 1968. It was powered by a Pratt and Whitney TF30-P-8 engine, since the intended Allison/Rolls-Royce TF41 engine was not available. Early A-7Ds had Navy probe and drogue style aerial refueling systems. (LTV via J. Sullivan)

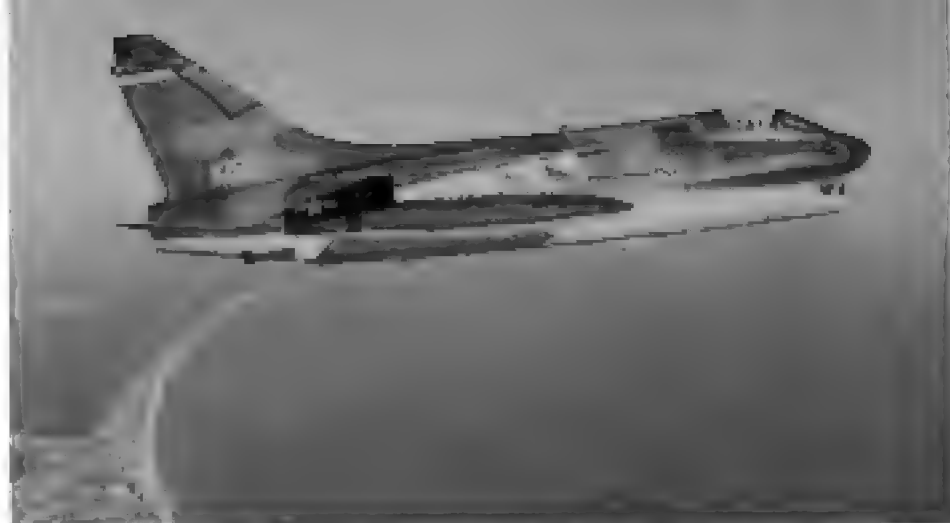


By late 1992, all A-7Ds are to be retired to Davis-Monthan Air Force Base for storage. Twenty A-7Ds are to be supplied to the Hellenic Air Force (Greece) in return for the use of air bases at Athens and Souda Bay, Crete. A-7Ds are also used as chase aircraft for the 6812th Test Group at Edwards Air Force base and are the last active USAF A-7s.

## A-7D (ER)

During 1972, LTV proposed a dedicated anti-armor ground attack version of the A-7D to be called the A-7D(ER) for extended range. The proposal included a fuselage stretch for increased fuel capacity and an increase in armament with the addition of a General Electric GAU-8A 30MM six barrel rotary cannon (the gun used in the A-10 Thunderbolt). The proposal was an outgrowth of the earlier proposal for the AX program which was won by the Republic A-10. In a flyoff held during 1972 between the A-7D and the A-10, the A-10 won again and the A-10 went on to prove itself as a premier tank killer during Operation DESERT STORM.

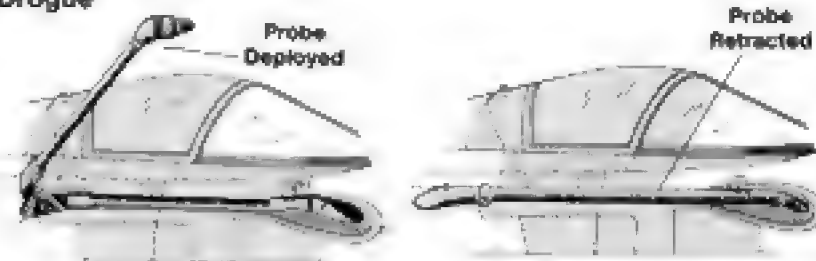
The first prototype A-7D-1CV was repainted in Light Gray over White with Red panels on the wings, horizontal stabilizer and vertical fin for testing at Edwards AFB, California. The refueling probe has been replaced by a USAF style universal refueling receptacle. (Terry Love)



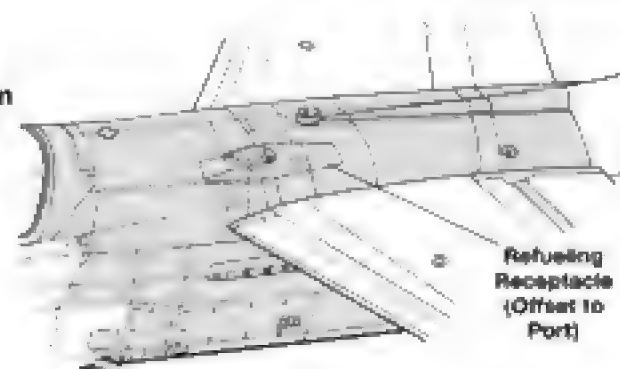
This A-7D (69-6194) flies over the Gulf of Mexico off Eglin AFB Florida. The aircraft was on a test flight to fire a YAQM-127A Supersonic Low Altitude Target (SLAT) missile. The Navy aerial refueling probe identifies this A-7D as one of the first production block. (USAF via Rod Bankston)

## Refueling Equipment

A-7A/B  
Early A-7D  
Probe & Drogue



Late A-7D  
Flying Boom  
Receptacle





The first twenty-six A-7Ds were produced with the probe and drogue serial refueling system. For flight tests it was necessary for the tankers to use the drogue system adapter for the flying boom. These two A-7Ds are on a practice bombing mission out of Edwards AFB during 1969. (USAF)

A-7Ds of the Iowa Air National Guard (174th TFS) line up and wait their turn to take on fuel from a Kansas ANG KC-135E (56-3604). The high speed aerial boom refueling technique takes much longer to fuel aircraft than the drogue system since the tanker can only refuel one aircraft at a time. (Iowa Air National Guard)



A New Hampshire ANG KC-135 refuels a A-7D of the 198th Tactical Fighter Squadron, Puerto Rico Air National Guard. In this system of serial refueling the receiver aircraft flies into position behind and below the tanker and the boom operator flies the probe to the fuel receptacle. (Eric Cintron)





An A-7D-13-CV of the 140th Tactical Fighter Wing of the Colorado Air National Guard, 72-0236 carries the Colorado state flag on the fin and a Tiger unit insignia on the forward fuselage. The number one pylon is fitted with a personal equipment pod. (Jim Sullivan)



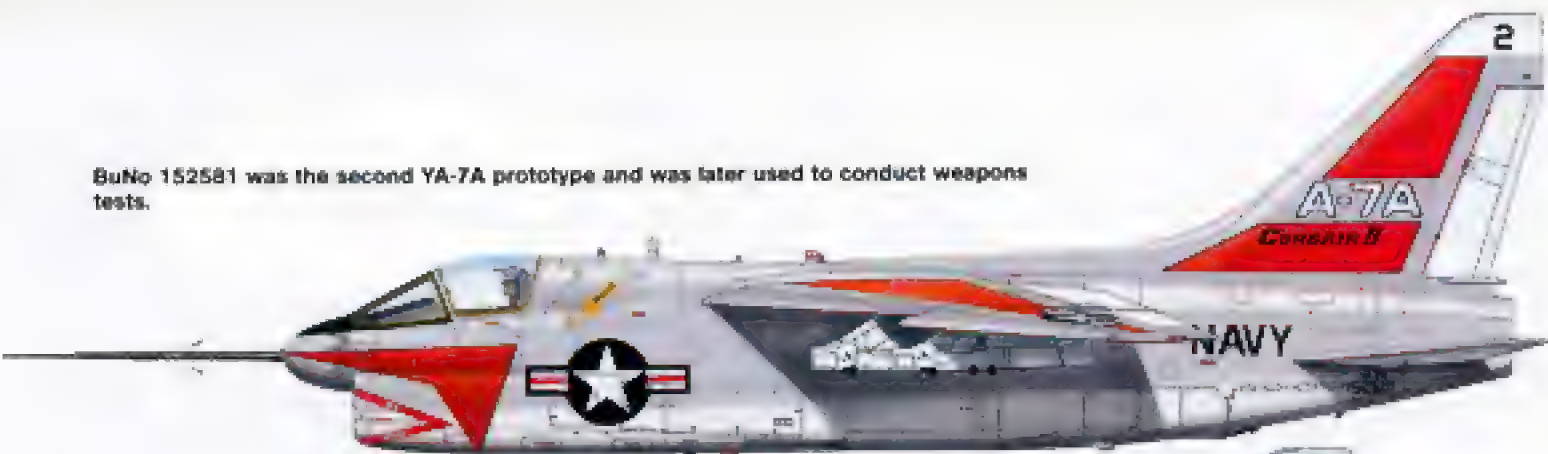
An A-7D-8-CV (70-0949) parked on the ramp at Myrtle Beach Air Force Base, South Carolina. Units from the 354th Tactical Fighter Wing at Myrtle Beach AFB were the first A-7Ds to see action over Vietnam. 70-0949 was serving with the 355th TFS and carries an MB tail code. (Jim Sullivan)

An A-7D-8CV (70-0989) of the 3rd TFS, 388th TFW on the ramp at Korat Royal Thai AFB, Thailand during 1975. The 3rd TFS flew bombing missions over North Vietnam, Sandy search and rescue (SAR) missions and provided air cover during the *Mayaguez* incident of May 1975. (Nicholas J. Waters III)

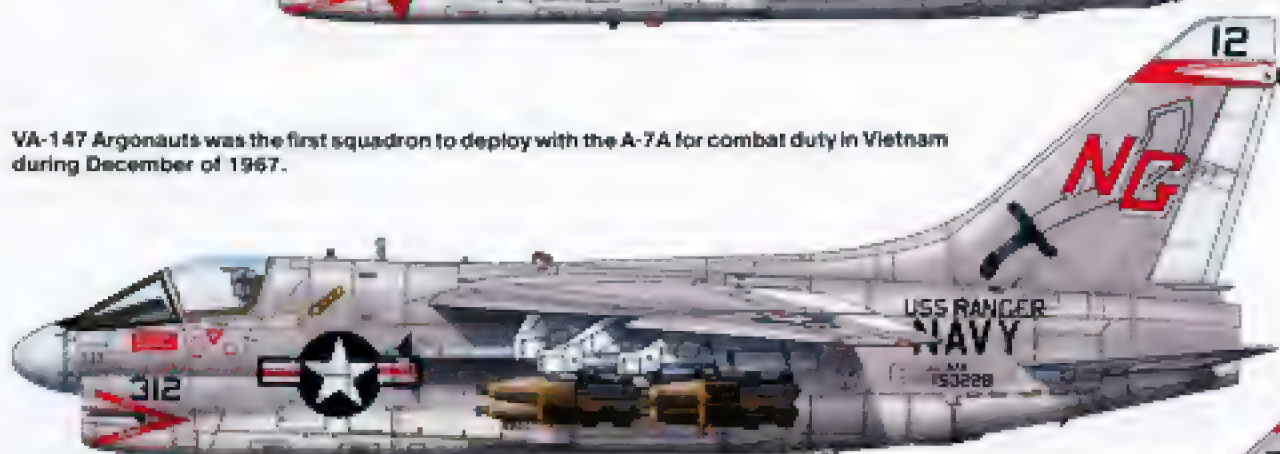


This A-7D-15CV (73-1015) on the ramp at McEntire Air National Guard Base, S.C. carries the ANG badge on the fin and the state name in White. The right avionics bay is open and a radio test was being conducted. All 157th TFS aircraft carried an SC tail code and the aircraft was camouflaged in a two-tone Green and Tan over Light Gray scheme. The Black painted outline on the vertical fin is the VHF radio serial. (Jim Sullivan)

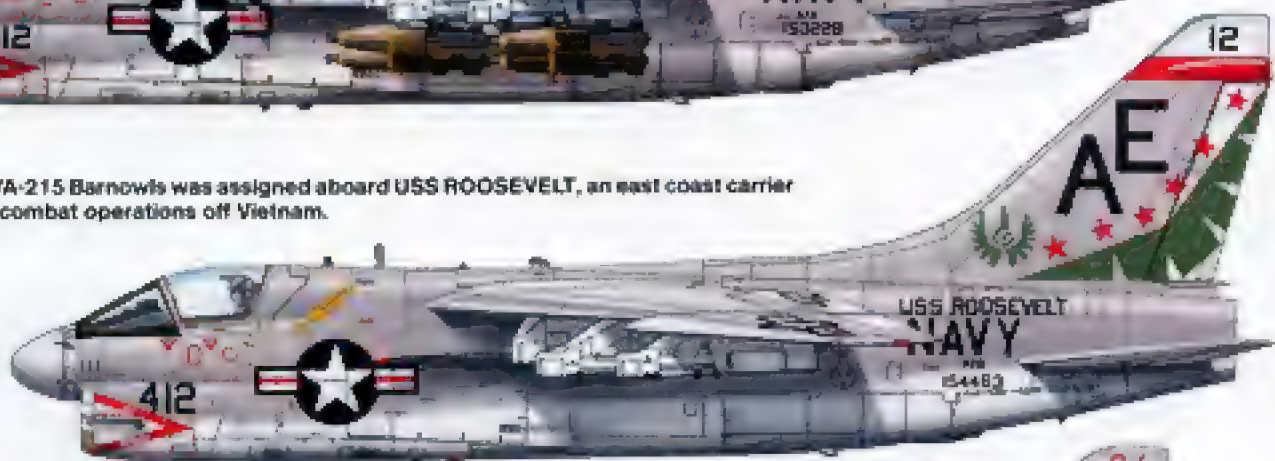
BuNo 152581 was the second YA-7A prototype and was later used to conduct weapons tests.



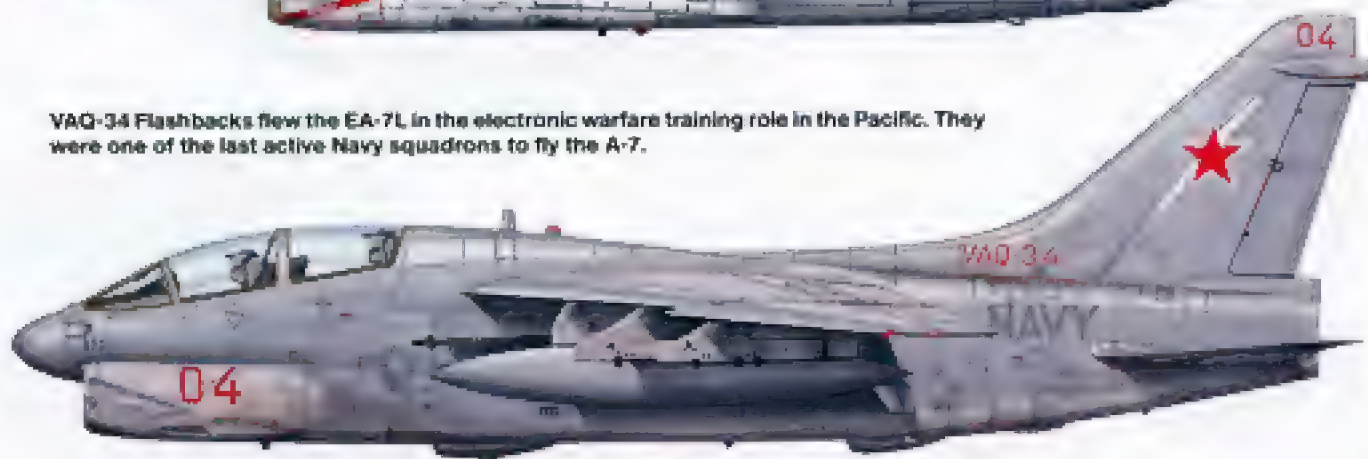
VA-147 Argonauts was the first squadron to deploy with the A-7A for combat duty in Vietnam during December of 1967.



This A-7B of VA-215 Barnowls was assigned aboard USS ROOSEVELT, an east coast carrier deployed for combat operations off Vietnam.



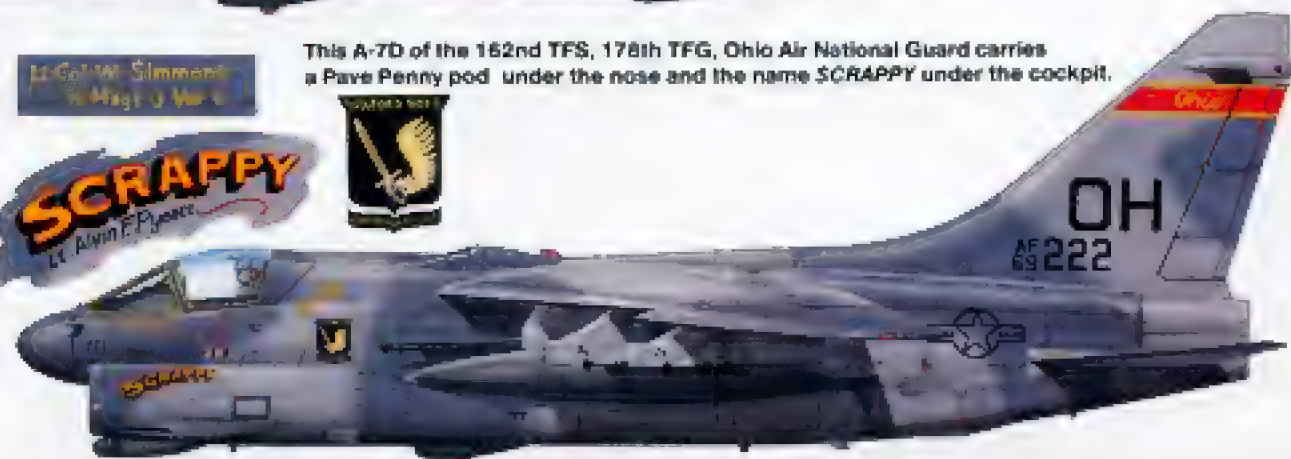
VAQ-34 Flashbacks flew the EA-7L in the electronic warfare training role in the Pacific. They were one of the last active Navy squadrons to fly the A-7.



1st Lt. Alvin E. Poyner  
1st Lt. Alvin E. Poyner



This A-7D of the 162nd TFS, 178th TFG, Ohio Air National Guard carries a Pave Penny pod under the nose and the name SCRAPPY under the cockpit.

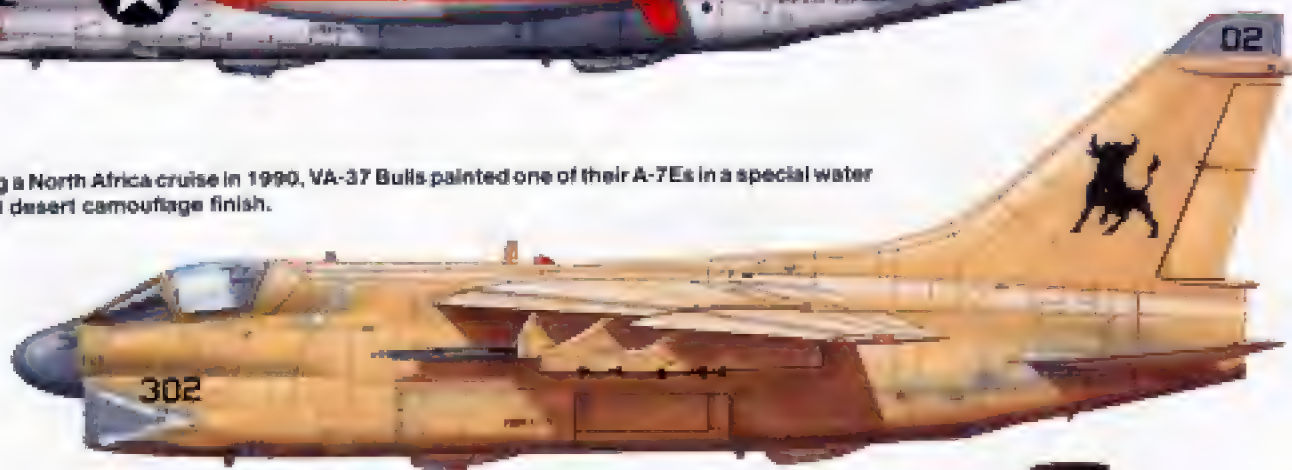




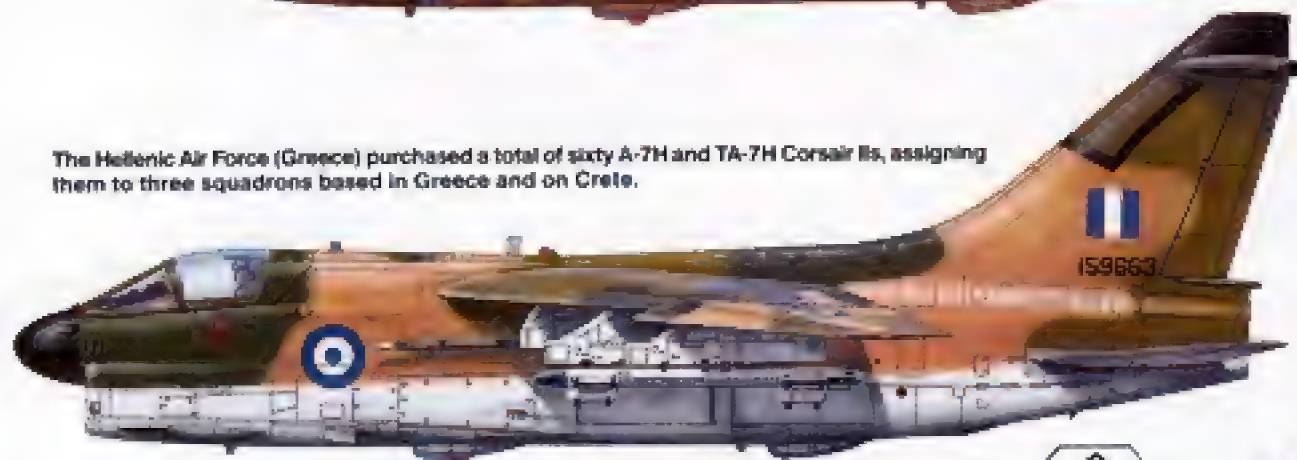
VA-86 Sidewinders flew A-7Es off USS NIMITZ when assigned to the Atlantic Fleet.



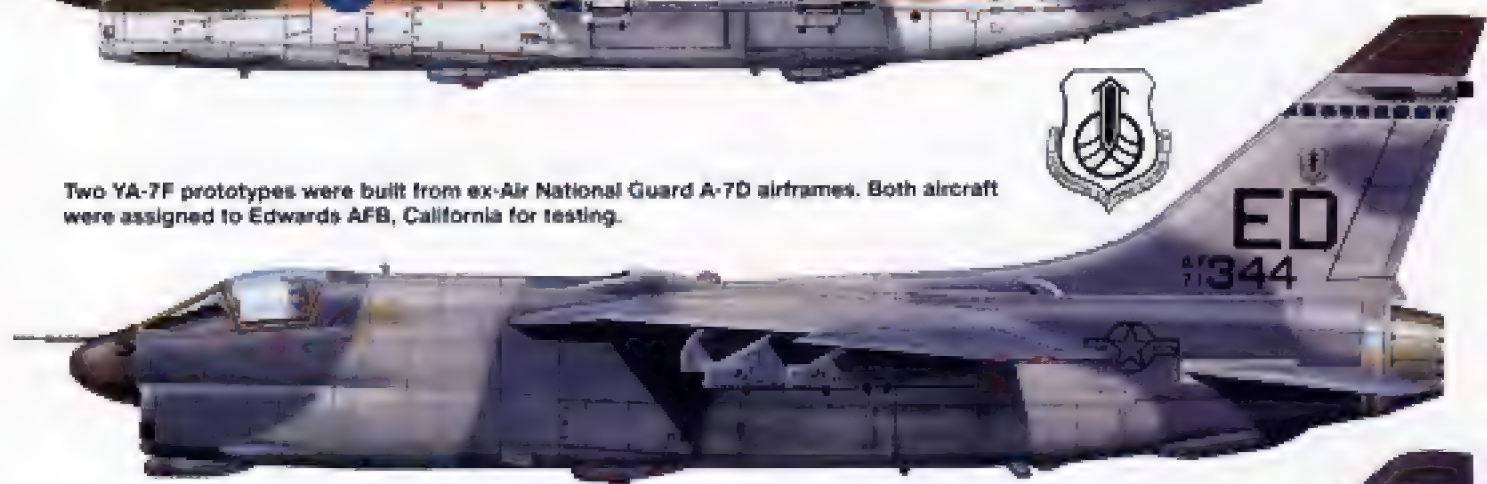
During a North Africa cruise in 1990, VA-37 Bulls painted one of their A-7Es in a special water based desert camouflage finish.



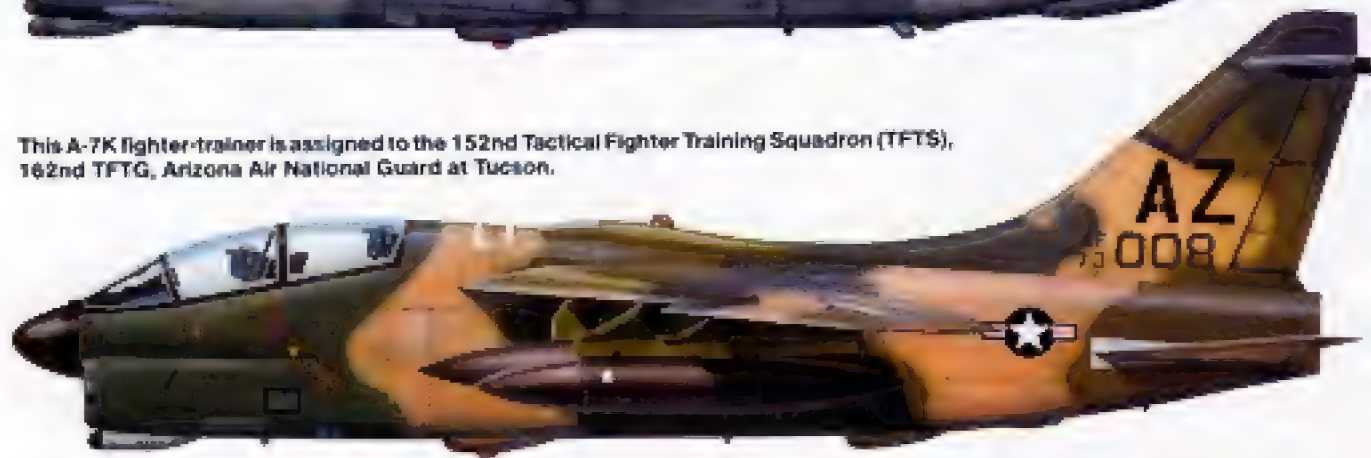
The Hellenic Air Force (Greece) purchased a total of sixty A-7H and TA-7H Corsair IIs, assigning them to three squadrons based in Greece and on Crete.



Two YA-7F prototypes were built from ex-Air National Guard A-7D airframes. Both aircraft were assigned to Edwards AFB, California for testing.



This A-7K fighter-trainer is assigned to the 152nd Tactical Fighter Training Squadron (TFTS), 162nd TFTG, Arizona Air National Guard at Tucson.





An A-7D of the 198th TFS, Puerto Rico Air National Guard flies in formation with two Dassault/Breguet Mirage IIIEV fighters of the Venezuelan Air Force. The Puerto Rico Air National Guard regularly deploys to Central and South American countries due to the PRANG's bi-lingual capability. (Eric Cintron)

This A-7D-12-CV (72-0197) of the 198th TFS, Puerto Rico Air National Guard was enroute to the Republic of Panama. All U.S. Air National Guard units are tasked with the defense of the Panama Canal and associated Canal Zone Area. The left wing spoiler was a replacement from another A-7D that carried the new two tone Gray camouflage. (Eric Cintron)



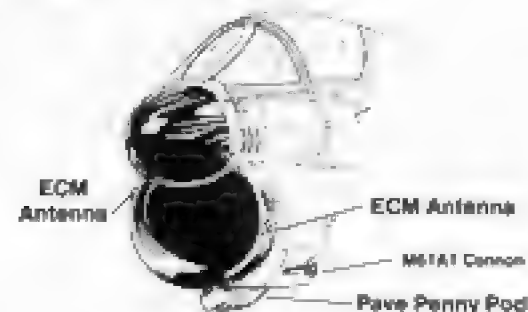
The housing under the nose of this A-7D-5 (69-8209) contains a Pave Penny laser seeker system and the large Black radome houses the AN/APQ-128 forward looking radar. This aircraft was assigned to the 198th TFS Puerto Rico Air National Guard (PRANG) and carried a Green kill marking on the fuselage gained during a deployment to Honduras for exercises. The "kill" was with a simulated Sidewinder AAM. (Eric Cintron)

## Nose Development

A-7D  
(Early)



A-7D  
(Late)







This A-7D-8CV (70-1001) was used at Eglin AFB, FL, to test the GPU-5/A 30MM gun pod. The A-7D was from the 120th TFS Colorado Air National Guard. For the firing test the A-7 was mounted on jacks and securely tied down. The GPU-5/A weighs 1,865 pounds (loaded), is 14 feet 2 inches long and has a muzzle velocity of 3,200 feet per second. (USAF via Rod Bankston)

The armament panel on this A-7D indicates that 20mm ammunition was to be loaded. A loader is filling the ammunition drum with High Explosive (HE) cannon rounds. An AIM-9 Sidewinder air-to-air missile is already loaded on the fuselage station. (Eric Clinton)



Armors from the 198th TFS use an MJ1 loader to move 500 pound Mk 82 free fall bombs to their A-7Ds, while other armorers prepare the fusing wires on the A-7D-10-CV (71-0325) in the background. All Air National Guards units must stay proficient in both air-to-ground and air-to-air tactics. (Eric Clinton)

An A-7D of the 198th TFS prepares to taxi at Tyndall AFB, Florida for a mission over the Gulf of Mexico. The 198th was participating in a Copper Flag missile firing competition during February of 1989 and carried a live AIM-9L Sidewinder missile on the number 5 fuselage station. (Eric Clinton)





An armorer guides a 500 pound Mk 82 GP low drag fragmentation bomb onto the number 3 wing pylon of this A-7D. The A-7D was capable of carry up to 15,000 pounds of external ordnance on six wing and two fuselage stations. (Eric Cintron)



The effectiveness of the new two-tone Gray camouflage scheme is evident on this A-7D-6-CV (69-6243) of the 120th TFS, Colorado Air National Guard. The new scheme consists of a Light Gray and Blue-Gray in a wraparound camouflage. The CO tail code and serial number are in a very Light Gray. (Terry Love)

AGM-65 Maverick anti-tank missiles are loaded onto a 174th TFS, A-7D. The AGM-65 is an air-to-ground missile that can be fitted with either a TV or infrared seeker. The Maverick proved itself in the Persian Gulf, knocking out hundreds of Iraqi tanks during the short ground war. (Iowa Air National Guard)



A flight of A-7Ds of the New Mexico Air National Guard based at Kirtland AFB, New Mexico. The Air National Guard received a number of new production A-7Ds right off the assembly lines, making the A-7 the first new aircraft ever delivered to the ANG. (James F. Davis)





(Below) SGT Ramos checks the avionics on MAJ Eric Cintron's A-7D-4-CV (69-6199) on the ramp at Muniz ANG Base, San Juan, Puerto Rico. The aircraft carries the two-tone Gray wraparound tactical camouflage. The pilot's name is carried inside the PRANG emblem on the fuselage; the PRANG insignia consists of the outline of Puerto Rico and the San Juan castle in black. (MAJ Eric Cintron)

(Above) This A-7D (70-1020) of the 76th Tactical Fighter Squadron, 23rd Tactical Fighter Wing, on the ramp at England AFB carries a sharkmouth marking on the nose and on the travel pod mounted on the outboard wing pylon. (Rotramel via Dave Menard)



An A-7D-12-CV (72-0192) of the 149th TFS, 192nd Tactical Fighter Group, Virginia Air National Guard on the ramp at Byrd International Airport, Richmond, VA. The aircraft uses the serial number to also indicate the unit assignment. (Virginia Air National Guard)





This early production A-7D (69-8217) of the 6512th Test Group on the ramp at Edwards Air Force Base has been modified with the Navy style refueling probe being deleted. (USAF Via Rod Bankston)

The 4451st Test Squadron used this A-7D-9-CV (70-1023) along with eighteen other A-7Ds to support the Lockheed F-117A Black Jets of the 37th Tactical Fighter Wing. The Goat Suckers were finished in a very dark two-tone Green camouflage and served as chase planes and squadron hacks. (Terry Love)

An A-7D-3-CV (69-8195) of the 6512th Test Group flies over Edwards AFB, CA during 1988. This is an early A-7D with the Navy style refueling probe. The aircraft at Edwards are used as test aircraft and chase planes and are painted overall White with Red recognition panels. (USAF)





# A-7E

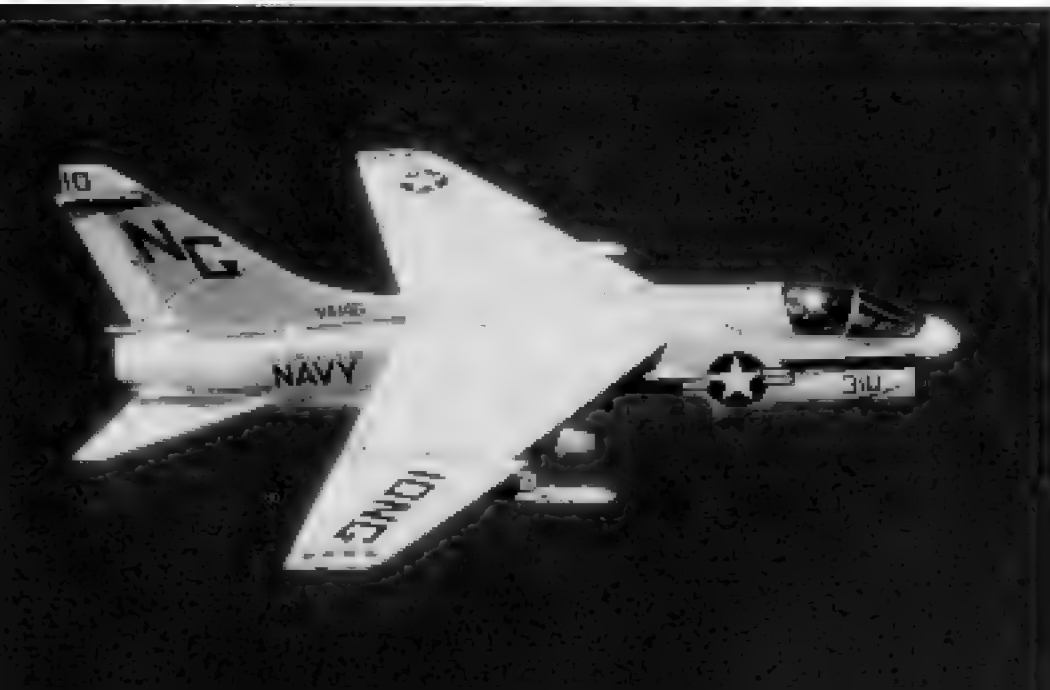
During 1969, the Navy decided that the A-7A and A-7B needed more power and improved avionics. As a result, it was decided to install the same engine (Allison/Rolls Royce TF41) that the Air Force had picked for the A-7D and much of the same avionics.

When the first A-7E airframe was completed, the Navy found that Allison had a problem with delivery of the TF41 engines and the first sixty-seven aircraft were completed with the Pratt and Whitney TF30-P-408 turbofan and designated as A-7Cs. When the TF41 engines were finally delivered, they were installed in the 68th and all later production aircraft. The first A-7E to fly was the second production aircraft (BuNo 158602) which lifted off at Dallas on 25 November 1969.

The A-7E differed from the A-7A and A-7B in a number of ways and was closer to the Air Force A-7D than either of the earlier Navy variants. The A-7E was powered by a navalized version of the 15,000 lbf Allison/Rolls-Royce TF41-A-2 non-afterburning turbofan engine giving the A-7E a top speed of 693 mph at sea level.

The A-7E weighed 19,127 pounds, some 800 pounds lighter than the Air Force A-7D (due mainly to changes in armor and the fuel system). Maximum takeoff weight was 42,000 pounds and the maximum carrier landing weight was 32,251 pounds. Maximum internal fuel capacity was 1,496 gallons and the two wing pylons on each wing were plumbed to carry 300 gallon Aero fuel tanks. With a maximum fuel load of 2,696 gallons the A-7E has a ferry range of 2,861 miles. Air-to-air refueling was accomplished in the same manner as the earlier A-7A and A-7B with a semi-retractable probe mounted on the starboard forward fuselage side. The early stirrup style boarding ladder was replaced with a stair type ladder mounted slightly higher on the fuselage side.

An A-7E (BuNo 157438) returns to its carrier after a mission over North Vietnam. The Corsair II was assigned to VA-146 Blue Diamonds aboard the USS CONSTELLATION (CV-64) in the Gulf of Tonkin. The wing and fin stripes were Medium Blue with Dark Blue diamonds. The tail flash was Yellow with a Dark Blue NG tail code. (Via Jim Sullivan)



Armament included the same General Electric M61A1 Vulcan cannon as used on the A-7D. Ammunition for the Vulcan is carried in a 1,000 round drum mounted in the fuselage behind the cockpit with the rounds fed to the gun via a flexible chute. In addition to the M61, the A-7E can carry the AIM-9 Sidewinder AAM, AGM-65A Maverick, AGM-45 Shrike, AGM-84 Harpoon and the AGM-88A Harm. The A-7E is also cleared to carry nuclear weapons such as the B43 2,100 pound strategic bomb, the Mk 28 2,040 pound strategic bomb, the B61 710 pound parachute retarded tactical weapon and the Mk 57 nuclear depth bomb. The Mk 57 weighs 510 pounds and is the smallest free fall nuclear weapon in the U.S. arsenal. The A-7E can carry all U.S. conventional weapons up to 2,000 pounds, including both free fall and laser guided (Smart) glide weapons.

The A-7E used the same weapons delivery and navigation system that was used in the A-7D with the exception of the C-8230/AWE armament station and control unit. The A-7E retained the AN/ASN-91 (V) Navigation/Weapons delivery system as well as the AN/APQ-126(V) forward looking radar. The A-7E was also equipped with the AN/AVQ-7(V) Head-Up-Display (HUD) that provided navigation, targeting and weapons information directly to the pilot. To protect the aircraft in high threat areas, the A-7E was equipped with the ALQ-126 active and ALR-45/50 internal radar homing and warning ECM system. The A-7E is also equipped with a chaff/flare dispenser.

The A-7E entered fleet service with VA-174 Hellrazors, the east coast Replacement Air Group (RAG) located at Cecil Field, Florida. VA-174 was tasked with introducing the A-7E into fleet service. The A-7E entered combat over Southeast Asia with VA-81 Sunliners and VA-83 Rampagers aboard USS FORRESTAL (CV-59) as part of Carrier Air Wing Seventeen (CVW-17). The first west coast squadron to equip with the A-7E was VA-122 Flying Eagles, the west coast RAG.

An A-7E of VA-192 Golden Dragons taxis on the deck of USS KITTY HAWK (CV-63) during Gulf of Tonkin operations during 1972. This A-7E (BuNo 157530) was flown by the Air Wing Commander (CAG) and carried multi-colored flashes on the rudder. The Corsair II is armed with 500 pound Mk 82 Snakeye bombs on outboard wing pylons. (Nicholas J. Waters III)



During 1977, the Texas Instruments Company developed a targeting pod that would allow night navigation and weapons delivery. The AN/AAR-45 Forward Looking Infrared (FLIR) pod weighs 720 pounds and is carried on the inboard starboard wing pylon. The information from the FLIR pod is displayed on a wide angle HUD developed by Marconi Avionics. Since 1977, over 321 FLIR pods have been produced for the Navy and installed on A-7Es.

At one point, LTV proposed to the U.S. Navy a twin-engined version of the A-7E, known as the Vought A-529D. The aircraft would have featured an enlarged fuselage to accommodate two 10,000 lbf General Electric GE404 power plants; however, the project never got beyond the drawing board.

The A-7E served the light attack squadrons until March of 1991 when VA-46 Clansmen and VA-72 Bluehawks, stationed aboard the USS JOHN F. KENNEDY (CV-67) were retired from fleet service. The last action for the two squadrons was during the air war portion Operation DESERT STORM that began during the early morning hours of 17 January and lasted until 27 February 1991.

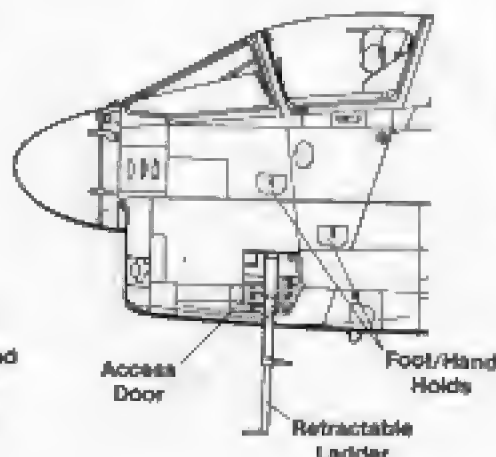
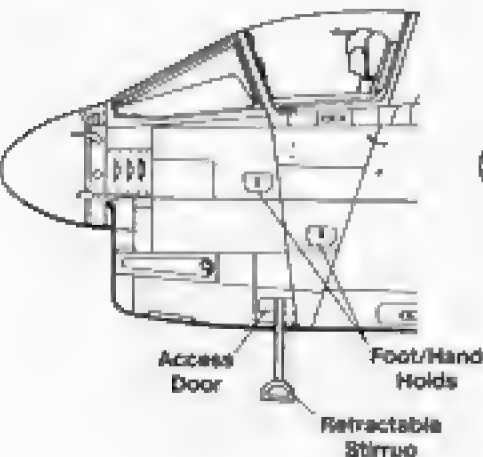
A total of 536 A-7Es were produced by the Vought Aeroproducts Division of LTV and at one time there were thirty-two attack squadrons flying A-7s from sixteen aircraft carriers. The A-7E is gradually being replaced in U.S. Naval Air Reserve squadrons by the McDonnell-Douglas F/A-18 Hornet.

During September of 1991, the Navy announced that negotiations were ongoing for the sale of twenty-four A-7E and six TA-7Cs to the Thai Navy to form that service's first combat wing. Plans call for two units, a front line squadron and an operational conversion unit to be formed with the ex-USN aircraft. Both units would be based at Utapao air base, which is part of the Thai naval complex at Sattahip. Reportedly, negotiations are also ongoing with several other nations for the purchase of surplus A-7Es.

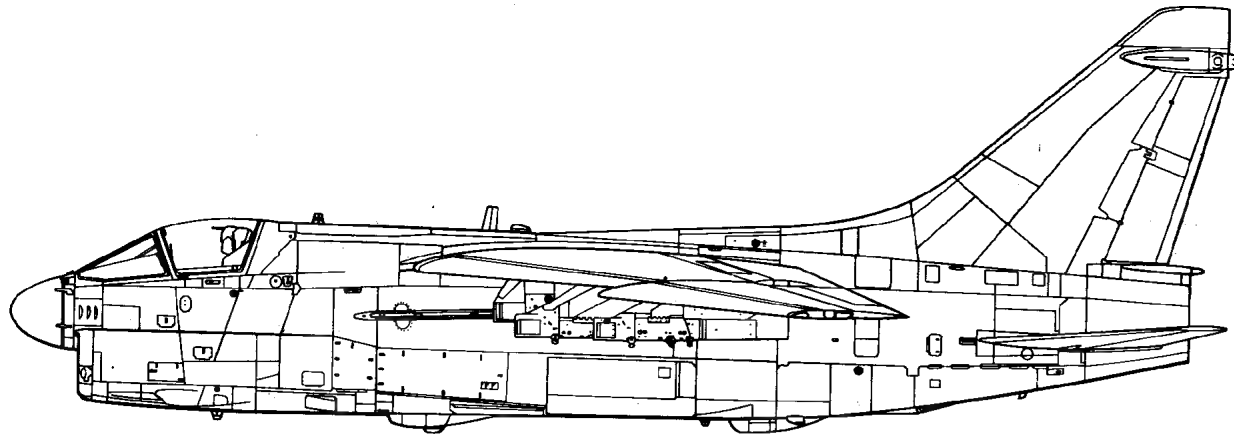
## Boarding Ladder

A-7A,B,P

A-7C,D,E



This A-7E of VA-97 aboard USS CARL VINSON (CVN-70) has been modified with ECM button antennas on either side of the air intake. The aircraft side number 300 identifies it as being the squadron's CAG aircraft. (Navy)



## Specifications

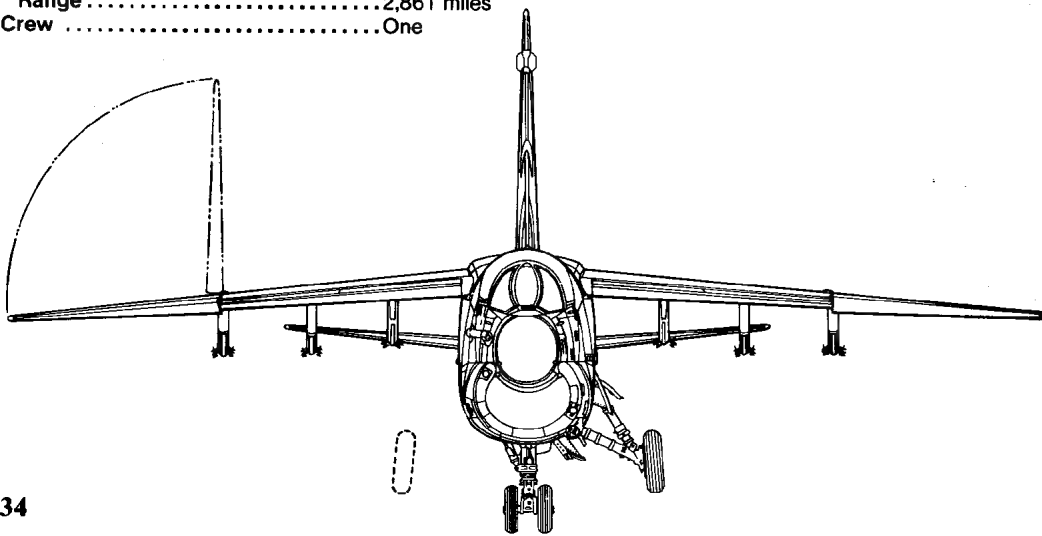
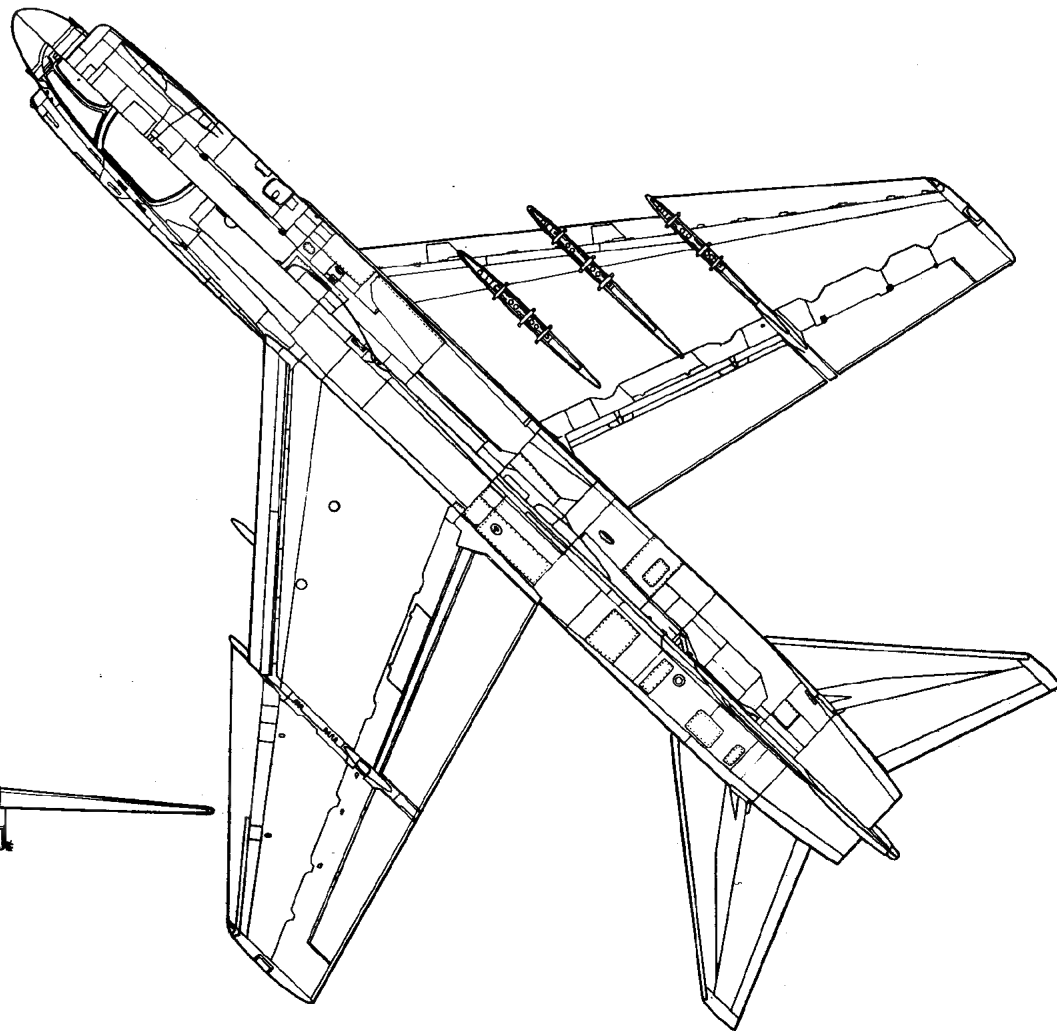
### LTV A-7E Corsair II

Wingspan ..... 38 feet 9 inches  
 Length ..... 46 feet 1.5 inches  
 Height ..... 16 feet 2 inches  
 Empty Weight ..... 19,127 pounds  
 Maximum Weight ..... 42,000 pounds  
 Powerplant ..... One 15,000 lbst Allison  
 TF41-A-2 turbofan.

Armament ..... One M61A1 Vulcan 20MM  
 cannon and up to 20,000  
 pounds of ordnance.

#### Performance

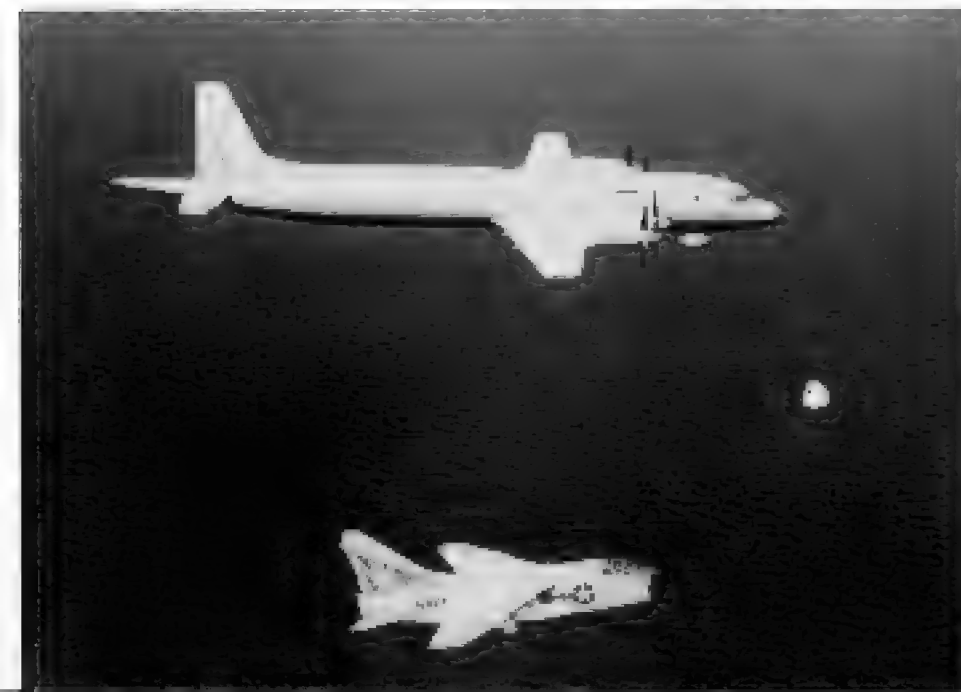
Maximum Speed ..... 693 mph  
 Service ceiling ..... 47,000 feet  
 Range ..... 2,861 miles  
 Crew ..... One





This A-7E (BuNo 157574) of VA-12 Clinchers has the air brake deployed as it pulls into formation during June of 1978. The Corsair has a buddy refueling store on the number one pylon. The tank carries the legend "VA-12 Super Tanker" on the side in Red. (Navy)

This A-7E (BuNo 158970) of VA-97 Warhawks flies escort on a Soviet Navy Ilyushin Il-38 May anti-submarine/maritime surveillance aircraft over the Pacific during 1979. The A-7E was assigned to carrier Air Wing Fourteen (CVW-14) aboard USS CORAL SEA (CV-43). (Lawson via Jim Sullivan)



An A-7E of VA-146 Blue Diamonds refuels an F-14A Tomcat of VF-211 over the Pacific Ocean. Both aircraft are assigned to Carrier Air Wing NINE (CVW-9) based aboard the USS CONSTELLATION (CV-64) The A-7E was used as a backup tanker aircraft to the Grumman KA-6D. (Navy)

This A-7E Corsair II (BuNo 158285) of VA-46 Clansmen on the flight line at NAS Fallon, Nevada, is armed with an AGM-45A Shrike anti-radiation missile on the outboard wing pylon. The aircraft was camouflaged in overall Dark Gull Gray with Black numbers. (Navy)







An A-7E Corsair II of VA-97 Warhawks carries an AGM-62 Walleye TV guided glide bomb on the second wing pylon. The Walleye was first used in Vietnam and has proven to be a highly accurate weapon. Walleyes were used in the Persian Gulf to destroy various hardened targets. With data link the Walleye can be launched from one aircraft and then guided by another to its target. (Navy)

This A-7E (BuNo 156883) is armed with an AGM-65F Maverick infrared guided air-to-surface missile. The A-7E was bailed (loaned) to Hughes Aircraft, developer of the Maverick, for tests of the missile system. The Maverick is a fire and forget type of missile and it can be used day, night and under any weather conditions. (Hughes Aircraft)



## A-7 Weapons

### Missiles



AGM-88  
HARM



AGM-65 Maverick  
(4 Wing Station)



AIM-9J  
Sidewinder



AGM-84 Harpoon



AIM-9L  
Sidewinder



Forward Looking  
Infrared (FLIR) Pod

### Bombs



Mk 82  
500 lb  
Bomb



Mk 83  
1,000 lb  
Bomb



Mk 82  
Snakeye



Mk 117  
750 lb  
Bomb



2,000 lb Laser  
Guided Bomb



500 lb Laser  
Guided Bomb



CBU-30  
Cluster  
Bomb



Rockeye  
Cluster  
Bomb



BLU-27  
Napalm  
Bomb



Mk 84  
2,000 lb  
Bomb

### Rocket Pods



LAU-32 2.75" Rocket Pod  
(7 Shot)



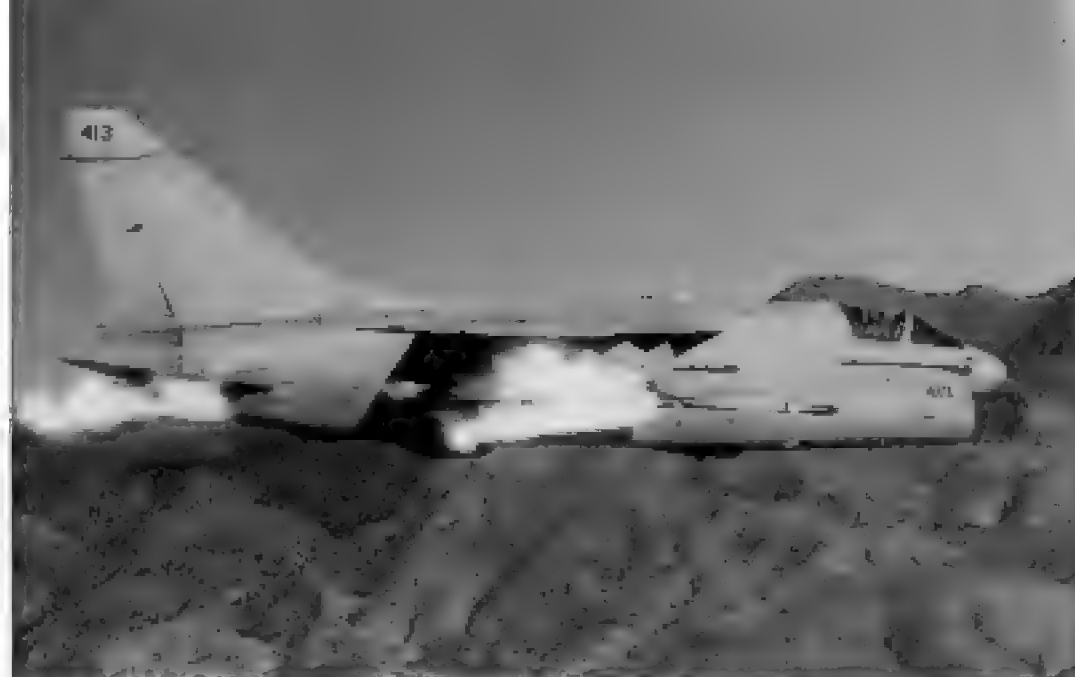
LAU-10 "Zuni" Rocket Pod  
(4 Shot)



LAU-3/3A 2.75" Rocket Pod  
(19 Shot)

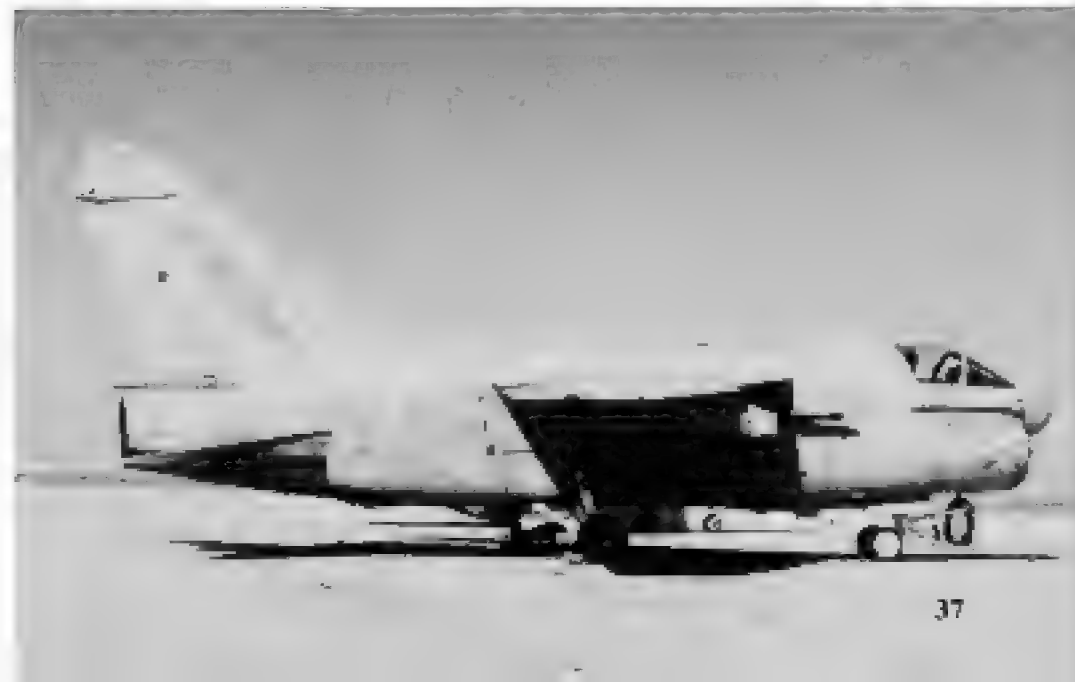


An A-7E of VA-122 Flying Eagles drops two Mk 82 Snakeye 500 pound retarded free fall bombs on the bombing range at the China Lake Naval Weapons Center, California. VA-122 operated as the Pacific Coast Replacement Air Group (RAG) training new A-7 aircrews for operational squadrons. (Navy)



An A-7E Corsair II of VA-204 River Battlers, flown by LCDR Ed "Boris" Kary, fires a five inch Zuni air-to-ground rocket at a target at NAS Fallon, during May of 1990. The Zuni is normally used against surface targets, however, on at least one occasion during Vietnam, Zunis were used to shoot down a MiG-17. (LT Kimo Mosk)

This A-7E (BuNo 157508) on the ramp at NAS Fallon, Nevada, was assigned to the Naval Strike Warfare Center, and carried the legend "Strike" on the fin in Medium Gray. The Strike Center teaches advanced attack tactics in much the same way Top Gun teaches fighter tactics. (Navy via Brown)





An A-7E of the Naval Air Test Center, NAS Patuxent River, Maryland is positioned behind the jet blast deflector on the flight deck of USS THEODORE ROOSEVELT (CVN-71) during late 1989. The A-7E carries an SD tail code indicating it was assigned to the Strike Directorate of NATC. (Navy)

VA-22 Fighting Redcocks painted a few of their A-7Es in experimental camouflage schemes, all of which were different. This Corsair, flown by the squadron's executive officer (as indicated by the XO on the fin cap), was painted in Charcoal, Tan and Gray in a wraparound pattern. The tail code NH and unit designation was in White while the national insignia was Dark Gull Gray. (Navy)



A pair of A-7Es of VA-37 Bulls on patrol off Norway during USS FORRESTAL's (CV-58) North Atlantic deployment in 1990. Both aircraft are carrying Forward Looking Infrared (FLIR) pods on the inboard wing pylons. (Navy)

An A-7E of VA-37 Bulls conducts low level training over the Sahara Desert in North Africa. The aircraft was painted in an overall Sand Yellow camouflage over its usual Dark Gull Gray tactical scheme (the Gray was showing through on the radome and fin cap). Only the unit insignia, side number and rescue markings were carried. (Navy)





This A-7 carries the designation NA-7E indicating that it was assigned to a special test category. The aircraft was assigned to the Naval Air Development Center at Warminster, Pa. The aircraft has been modified with a blade antenna being mounted behind the cockpit. (Hartman via Terry Love)

An A-7E on the ramp at the Naval Aviation Depot (NADEP) NAS Jacksonville, FL, during September of 1991. The former squadron markings (VAQ-34) are completely painted out and all that remains are the service, rescue and warning markings, along with the national insignia. (A. Adcock IV)

The oldest A-7E on the Pacific Coast during 1990 was BuNo 158658, a veteran of the Vietnam War. The aircraft was serving with VA-27 Royal Maces aboard USS CARL VINSON (CVN-70) and took part in the A-7E's last deployment in the Pacific. (Navy)





# A-7G

When the Swiss Air Force began looking for a replacement for its aging fleet of deHavilland Venom fighter-bombers during 1971, it showed interest in the A-7 Corsair II. Consequently, Vought was hailed two Block-10 A-7Ds (serial numbers 71-0294 and 0303) for use as demonstrators under the export designation A-7G.

The proposal made to the Swiss by LTV was for a modified A-7D airframe powered by an uprated 17,000 lbf Allison/Rolls-Royce TF41-A-3 turbofan engine. Certain pieces of avionics equipment were to be deleted, such as the AN/APN-190 Doppler radar and Loran. These would be replaced by Swiss specified equipment. The M61A1 Vulcan cannon was to be replaced by two Madsen 23MM cannons. The two A-7Gs were flown against the Fiat G-91 and the Douglas A-4M Skyhawk in an evaluation program. In the event, the Swiss purchased none of these, opting instead for thirty rebuilt Hawker Hunters.

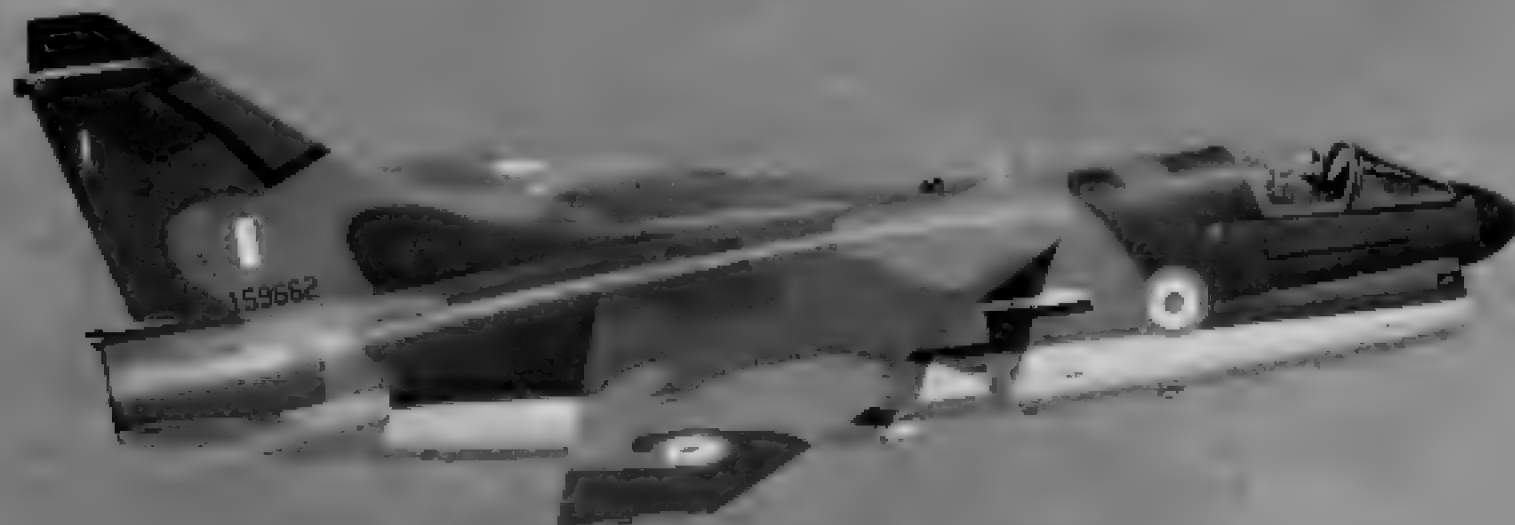
# A-7H

During 1974, the Greek Air Force (also called the Hellenic Air Force) ordered, through the Navy and the Military Assistance Program (MAP), sixty new production A-7Es under the export designation A-7H. The A-7H was externally identical to the A-7E with the exception of the refueling probe. Since the Greek Air Force did not have a tanker force, the probe was not needed and was deleted with the position fairing over.

First flight of an A-7H was on 6 May 1975 and deliveries to the Hellenic Air Force began during August of that same year. The Greeks used the A-7H to equip three squadrons: the 347th Mira at Larissa in northern Greece and the 340th and 345th Mira both based at Souda Bay, on the island of Crete. The Greek Air Force uses the A-7H mainly for anti-shipping duties under NATO in the Aegean and Eastern Mediterranean Sea.

In a follow-on order, the Greeks ordered five two seat trainers. The aircraft were again ordered through the Navy and MAP under the designation TA-7H. The TA-7H carried the same avionics and ECM equipment as on the Air Force A-7K and was powered by the Allison/Rolls-Royce TF41-A-400. Like the A-7H, the TA-7H has no refueling capability. As of late 1990, the Hellenic Air Force was still operating some forty-five A-7H and TA-7H aircraft.

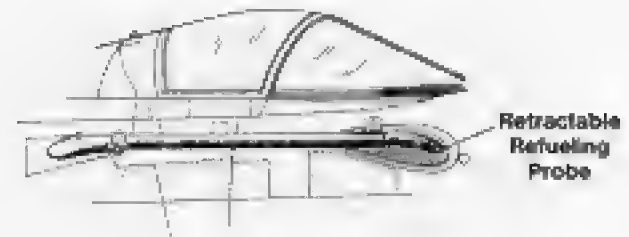
The Hellenic (Greek) Air Force (HAF) received 60 new production A-7s during the mid-1970s under the designation A-7H. This aircraft (159882) was the first A-7H and was delivered to the HAF in 1977. The A-7H had the probe and drogue air-to-air refueling capability deleted. (LTV)



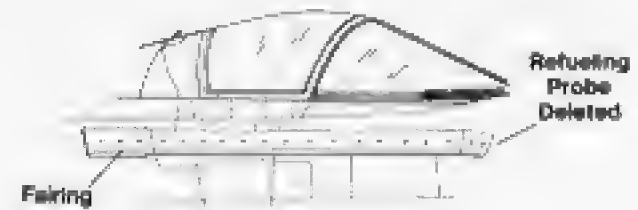
## Refueling Probe



A-7E

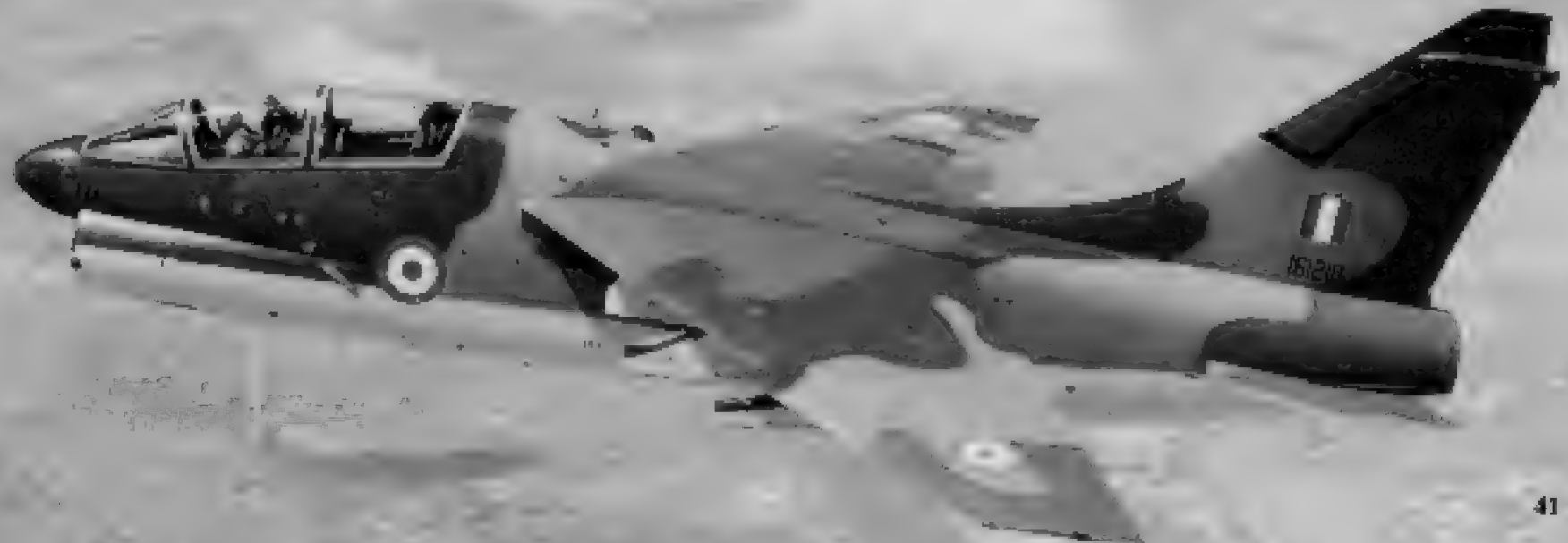


A-7H



An A-7H (159957) of the Hellenic Air Force takes off from its base in Larissa, Greece. The A-7H was basically an A-7E, modified with avionics equipment required by the HAF with the refueling probe deleted and faired over. (Hellenic Air Force)

In addition to the (60) A-7H aircraft, the Hellenic Air Force (HAF) also ordered (6) two seat TA-7H trainers. These were very similar to the USAF A-7K in configuration but had the air-to-air refueling capability deleted. (LTV)



# YA-7F

During June of 1985, the U.S. Air Force issued a request for information (RFI) for an interim aircraft that could fill their requirement for a close air support/battlefield air interdiction (CAS/BAI) aircraft. The response from LTV was a modified version of the A-7D originally called the A-7 Strikefighter (later renamed the A-7 Plus). The proposed modifications included a new afterburning engine, a Forward Looking Infrared (FLIR) system plus other avionics and structural improvements to handle the enhanced avionics and new power plant.

LTV's idea was to modify all of the 337 Air National Guard A-7Ds and A-7Ks to the A-7 Plus configuration. The estimated cost of the program was 6.5 million dollars per aircraft. This was about half the price of producing an entirely new airframe. The Air Force gave its initial approval during November of 1985 after picking LTV's proposal over three other competitors. By 1987, funds were made available for the conversion of two Air Guard A-7Ds to the A-7 Plus configuration. The first prototype A-7D (71-0344) was from the New Mexico Air National Guard while the second prototype (70-1039) was supplied by the Oklahoma Air Guard.

The modifications to the fuselage and wings were extensive. Externally the most noticeable change was the insertion of two fuselage plugs one in front and one behind the wing. The forward plug was 29.5 inches and the rear plug was 18 inches. This was done to provide proper weight and balance and to increase space for avionics, fuel and the increased engine length. The aft fuselage section was all new and included a new tail cone for the afterburner. The aft fuselage was angled upward some 4.34 degrees from the fuselage centerline to provide clearance for high angle of attack (AOA) landings. Two small ventral fairings for ECM gear were added below the fuselage on either side of the arresting gear.

The first YA-7F was a rebuilt and re-engined A-7D-11-CV (71-0344) of the 188th Tactical Fighter Squadron, New Mexico Air National Guard. The YA-7F featured a taller fin cap, extended afterburner tail section, stretched fuselage and wing LEXs. (LTV)

The wings have been completely reskinned and have new LTV developed trailing edge flap augments (a high lift device), lift dump spoilers, automatic maneuvering flaps and wing leading edge extensions (LEX). These wing modifications have contributed in an increase in the weapons load of up to 17,380 pounds. The span remains the same as all other A-7 variants. The vertical stabilizer was increased in height by 10 inches and the horizontal stabilizer were given a 5.25 degree down angle (anhedral).

The first prototype (71-0344), designated the YA-7F, had a 26,000 lbf Pratt and Whitney F100-PW-220 afterburning turbofan engine installed for its initial flight tests. Later, during development test flights, 71-0344 was returned from Edwards AFB to LTV, Dallas for installation of the 27,600 lbf General Electric GE-F110-GE-100 (the YA-7F never flew with the General Electric engine).

The avionics suite and instrument layout featured the latest in innovations. The instrument panel features a wide angle holographic Head-Up-Display (HUD) with a FLIR screen and color multi-function displays for the digital radar. The avionics upgrade features a fully integrated digital navigation/weapon delivery system and a secure radio system. The navigation system is based on the Ring Laser Gyro Internal Navigation and Global Positioning System (GPS) that can automatically navigate you to or inform you of your position within sixteen meters in three dimensions.

For night operations there is the standard radar altimeter, an automatic hands off, terrain following (ATF) system, a radar ground mapping system and a laser spot tracker (Pave Penny pod). Both YA-7F prototypes were fitted with a FLIR pod or low altitude night attack (LANA) system. The FLIR consists of a forward looking infrared sensor, weapons delivery computer and the HUD. The FLIR is integrated with the AN/APQ 126 forward looking radar and the automatic flight control system.

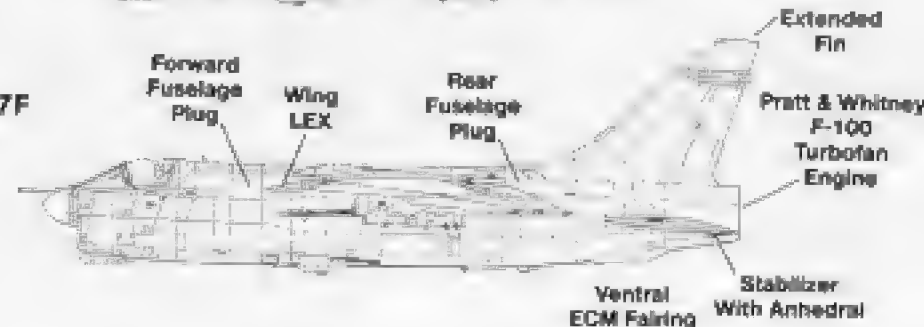
For protection in high threat environments the YA-7F has two ALE-40 chaff/flare dispensers, a radar warning receiver and twin ALQ-165/184 airborne self-protection jamming pods on the rear lower fuselage. The self-protection jamming pods have an uplook capability to guard against aircraft or missiles above the aircraft. Internal armament on the YA-7F was the same as the A-7D: M61A1 Vulcan cannon with 1,000 rounds of ammunition.

## Fuselage Development

A-7D



YA-7F



External armament loads include Mk 82, 83 and 84 GP bombs, either free fall or Laser guided, GPU-5 30MM gun pods, AGM-65 Maverick ASMs, AIM-9 Sidewinder AAMs and various Cluster Bomb Units (CBU). The YA-7F was also slated to carry the B-61 tactical nuclear weapon.

The empty weight of the YA-7F was 23,068 pounds with the Pratt and Whitney F100 engine and 23,866 pounds with the GE F110. Maximum takeoff weight with either engine is 46,000 pounds. Maximum sustained speed was limited to Mach 1.2 at 40,000 feet with afterburner. Maximum ferry range with four 300 gallon external tanks was 2,302 nautical miles and the service ceiling was 55,000 feet.

The first YA-7F prototype (71-0344) made its maiden flight on 29 November 1989 from the LTV Dallas facility and the second prototype flew on 3 April 1990. Both YA-7Fs underwent a flight test program at LTV Dallas and were then flown to Edwards Air Force Base, California for U.S. Air Force tests. The flight test program was undertaken by the 6510th Test Wing. The program was terminated during late 1990 after the Air Force made its decision to purchase a ground attack version of the General Dynamics F-16 Fighting Falcon.

YA-7F (71-0344) will remain at Edwards AFB and be placed on display in non-flyable condition at the Edwards museum. 70-1039 will be displayed at the Heritage Museum at Hill AFB, Ogden, Utah.

There was another A-7 proposal put forth by LTV to the Navy. The Navy was looking for an aircraft to replace the Douglas KA-3B and LTV offered a variant of the A-7E to fill the mission. The aircraft was to be known as the KA-7F and would have featured a larger fuselage to accommodate the increased internal fuel capacity, four 450 gallon wing tanks and a fuselage mounted hose and drogue refueling system. In the event the Navy opted for the Grumman KA-6D over the KA-7F.

The prototype YA-7F (71-0344) takes on fuel from a Air Systems Command KC-135A over Edwards Air Force Base. The aircraft was finished in the two tone Gray camouflage. The air scoop on the rear fuselage was for the auxiliary power unit. (LTV)



The prototype YA-7F was officially assigned to the 6510th Test Squadron during 1989 for evaluation. For armament tests, the aircraft was flown with AIM-9 Sidewinder air-to-air missiles and Mk 88 practice bombs. The pods below the rear fuselage are AN/ALQ 165/184 airborne self protection jammers. (USAF)

As tests progressed with the first YA-7F, the test air data probe was removed. The YA-7F was armed with the same General Electric M61A-1 Vulcan cannon as the A-7D. The YA-7F was powered by a 25,000 lbf Pratt and Whitney F100-PW-220 afterburning turbofan engine. (Terry Love)







The first prototype YA-7F deploys the under fuselage speed brake during a test flight. The speed brake has an area of 25 square feet and is used to slow the aircraft for tactical maneuvering. During this flight test, YA-7F angle of attack and stall characteristics were investigated. (USAF)

With its heightened fin and extended fuselage, the YA-7F has a strong resemblance to the earlier F8U Crusader, from which the A-7 series was developed. The same ECM tail warning radar and Pave Penny pod from the A-7D was retained. (USAF)



The number 1 YA-7F (71-0344) flies a high angle of attack (AOA) test flight over the El Paso Mountains near Edwards AFB California. The YA-7F has been flown to a top speed of Mach 1.2 the fastest of the A-7 series. (USAF)



The second YA-7F prototype (70-1039) was fitted with a spin recovery parachute system mounted in a housing below the rudder. The second YA-7F prototype was a rebuilt A-7D that had been previously assigned to the 125th TFS, Oklahoma Air National Guard. After all flight tests were completed the Number 2 YA-7F was given to the Heritage Museum, Hill AFB, Utah. (USAF)

The spin recovery parachute system was housed in the fairing that extended from the base of the rudder back along the tail cone. The parachute was stored in the lower section and was attached by a steel cable to the upper tail section at the base of the vertical fin. The parachute was deployed during a test in July of 1990. (USAF)



The YA-7F has wing leading edge extensions (LEX) and two upper fuselage air scoops for cooling air. During this test, two AIM-9 Sidewinder air-to-air missiles were carried on the fuselage stations. The fairing over the Pratt and Whitney F100 engine afterburner was removed during flight tests. (USAF)

The two YA-7F prototypes in flight together over the test range at Edwards Air Force Base, California. The flight test program was completed during December of 1990 and both aircraft were deactivated and removed from flight status. (USAF)



# A-7K

During April of 1979, the Air Force ordered a two seat conversion of the A-7D for the combat crew training mission. The contract called for one conversion under the designation YA-7K and twelve new built aircraft to be designated as A-7Ks. Two follow up contracts during 1980 and 1981 called for production of twelve and six aircraft respectively.

The YA-7K prototype was an A-7D (73-1008) of the Ohio Air National Guard Unit at Rickenbacker AFB, Ohio. The A-7D was returned to LTV Dallas for the extensive conversion.

The A-7K has a sixteen inch plug inserted in front of the wing and an eighteen inch plug behind the wing. The aircraft differs from the Navy TA-7C in that it is fitted with Douglas Escapac 1-C2 zero-zero ejection seats and it is equipped with the Air Force flying boom refueling system. The universal fuel receptacle is located on the upper fuselage, on the center line. This differs from the A-7D which has the fuel receptacle located to the left of the fuselage center line. Three high intensity lights are positioned ahead of the refueling receptacle to provide illumination for the boom operator during night operations.

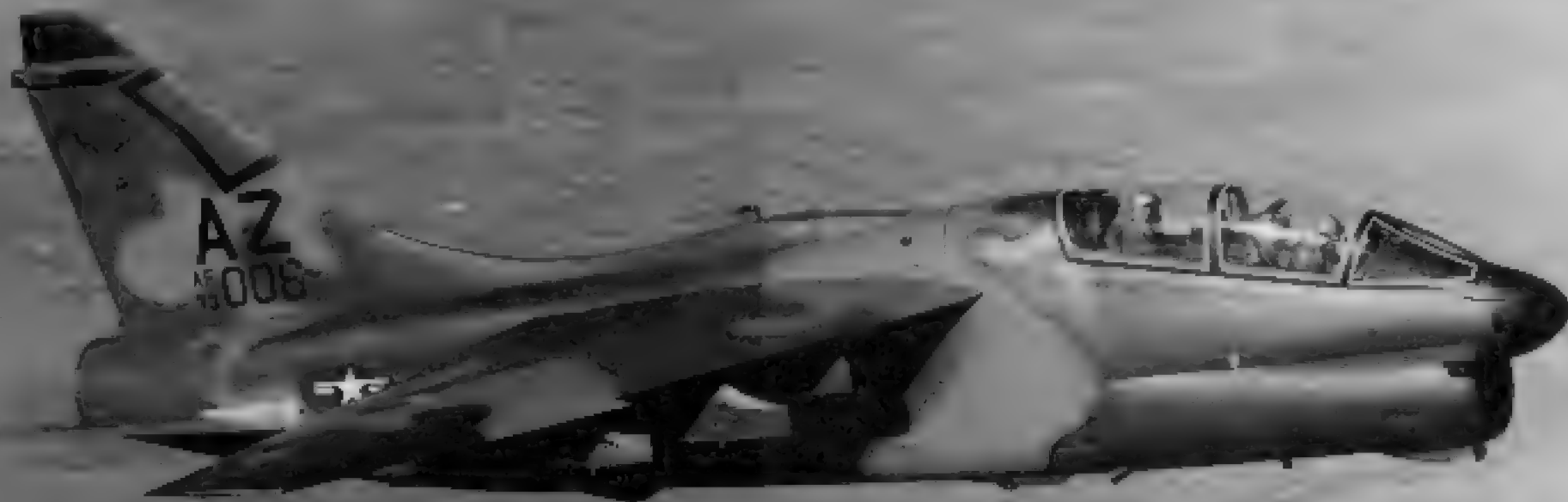
To aid in short field performance, a field type arrestor hook is fitted below the rear fuselage. The wings retain the fold feature and full underwing stores capability. An additional augmentor flap was added to the rear of the standard flaps to aid in short field landings.

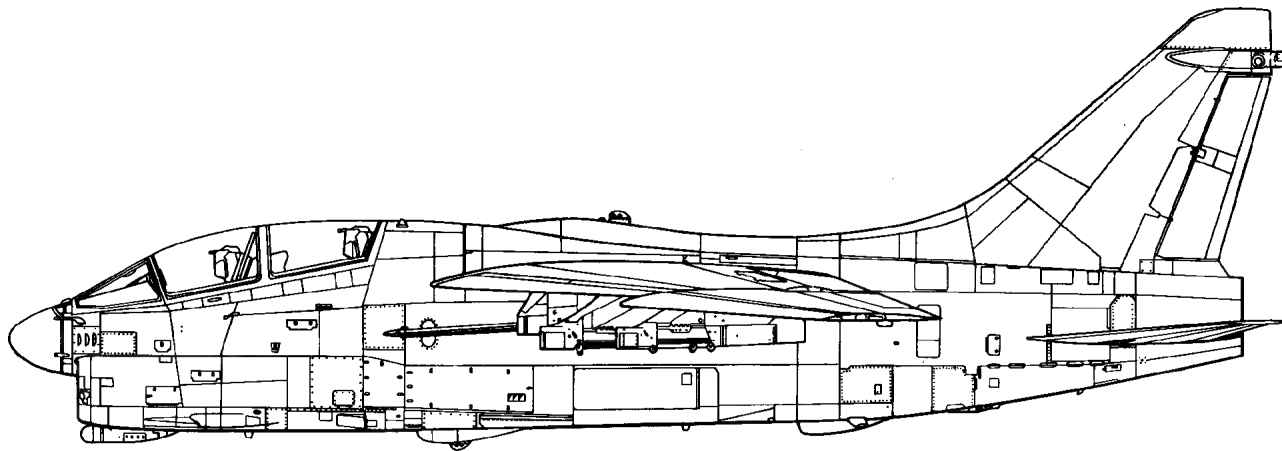
The A-7K is armed with the M61A1 rotary cannon with 1,000 rounds of ammunition, although normally only 500 rounds are carried. The A-7K is capable of carrying up to 19,000 pounds on six underwing stations and 500 pounds on each fuselage station. All of the weapons that can be carried on the A-7D can be carried on the A-7K.

For added protection, various panels of Boron Carbide (HFC) armor are placed around the aircraft to protect the engine fuel cells and pilots against small arms and anti aircraft artillery fire.

Most of the New Mexico ANG A-7Ks are fitted with the Low Altitude Night Attack (LANA) pod. Carried on station six, it permits low altitude navigation and target detection day or night. The information from the LANA pod is displayed on the HUD. The system is very similar to the FLIR pod carried on the U.S. Navy A-7Es. The FLIR is integrated with the AN/APQ-126 radar and automatic flight control system (AFCS) to allow for automatic terrain following (ATF) flight under most weather conditions. The last A-7K was delivered to the Air National Guard during September of 1984 — ending A-7 production at LTV Dallas.

The first A-7K was a rebuilt A-7D-15-CV (73-1008). It was similar to the earlier Navy TA-7C, with the exception of the refueling receptacle on the upper fuselage centerline. The first A-7K was assigned to the 152nd Tactical Fighter Training Squadron, Arizona Air National Guard, Tucson, Arizona. (LTV)





## Specifications

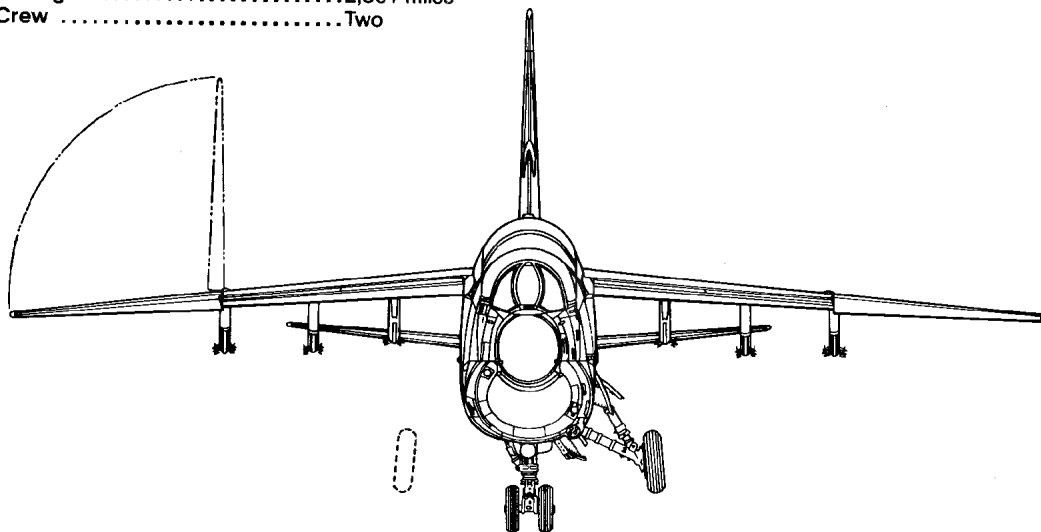
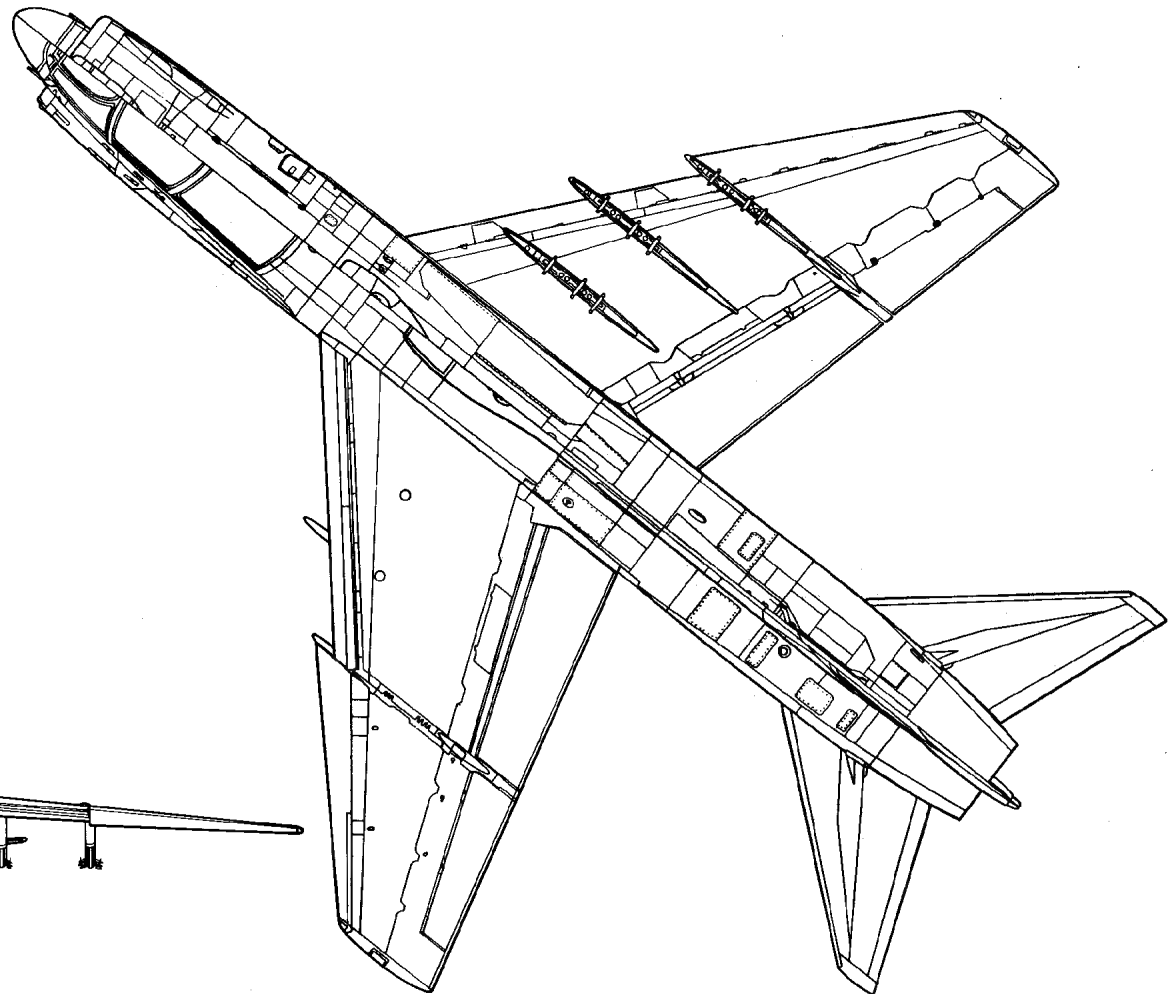
### LTV A-7K Corsair II

**Wingspan** ..... 38 feet 9 inches  
**Length** ..... 48 feet 11.5 inches  
**Height** ..... 16 feet 2 inches  
**Empty Weight** ..... 21,300 pounds  
**Maximum Weight** ..... 42,000 pounds  
**Powerplants** ..... One 15,000 lbst Allison  
    TF-41-A-2 turbofan

**Armament** ..... One M61A1 Vulcan 20MM  
    cannon and up to 20,000  
    pounds of ordnance.

#### Performance

**Maximum Speed** ..... 698 mph  
**Service ceiling** ..... 47,000 feet  
**Range** ..... 2,861 miles  
**Crew** ..... Two







The prototype A-7K (73-1008) flies in formation with a USAF F-4C (64-0727) over Edwards AFB, California. The two aircraft had been conducting AIM-9 Sidewinder missile launches (the F-4 has a missile shaped supersonic target under its left wing). The A-7K was a fully combat capable crew trainer. (USAF)



The 162nd Tactical Fighter Training Group (tail code AZ) received the majority of A-7Ks built, including 79-0468. The first A-7K was a rebuilt A-7D, while the other thirty were all new built aircraft. (Terry Love)

This A-7K (73-1008) takes on fuel from a McDonnell-Douglas KC-10 Extender over Edwards AFB, California. The pilot of the A-7K gets the aircraft into position and the boom operator flies the refueling boom into contact with the A-7K's universal fuel receptacle. (USAF)



Ground crewmen remove the "Remove before flight" flags from an A-7K of the 149th Tactical Fighter Squadron, Virginia Air National Guard. 80-0288 was one of twelve new A-7Ks delivered during 1981. The A-7K had a built in Auxiliary Power Unit (APU) and did not need an external starter cart. (Paskowski via T.Love)





This A-7K (81-0076) was assigned to the 124th Tactical Fighter Squadron, Iowa Air National Guard. The aircraft flies over northern Wisconsin on a practice bombing mission during 1989. The aircraft is in a two tone Green camouflage and carries Aero 300 gallon fuel tanks and triple ejection racks (TERs). (USAF via Squadron/Signal)



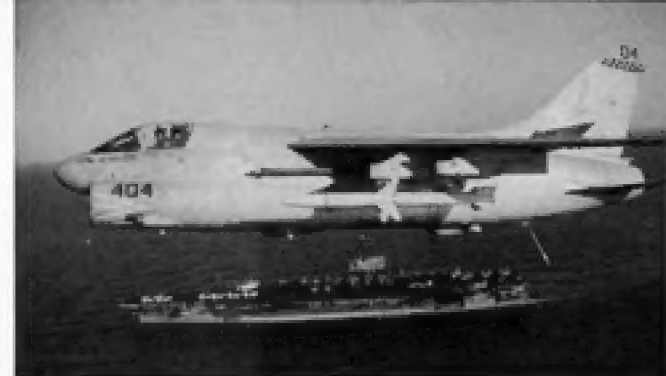
This two tone Gray A-7K (73-1008) of the 188th Tactical Fighter Squadron, Puerto Rico Air National Guard, carries a Light Gray AIM-9 Sidewinder on the fuselage station and a Black Multiple Ejector Rack (MER) on the second wing pylon. (Eric Cintron)

An A-7K (80-0290) of the 188th Tactical Fighter Squadron, New Mexico Air National Guard parked on a rain soaked ramp. A pilot's personal equipment pod is on the number two wing pylon. The A-7K carries no tail code; only the Virginia and New Mexico Air National Guard operate aircraft without tail codes. (Terry Love)



The long side opening canopy is a recognition feature of both the TA-7C and A-7K. This A-7K (81-0077) was assigned to the 124th Tactical Fighter Squadron, Iowa Air National Guard. The aircraft was finished in a two tone Green and Tan wraparound camouflage scheme. (Terry Love)





## A-7Es of Desert Storm (VA-72 Photos by John Lennhouts)







This A-7D of the 198th Tactical Fighter Squadron, Puerto Rican Air National Guard was flown by MAJ Eric (The Hook) Cintron.

A-7E Corsair IIs of VA-22 Fighting Redcocks were painted in this experimental camouflage finish while the squadron was assigned to USS ENTERPRISE. The squadron saw action in the Persian Gulf during 1988.

